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THIRD SERIES

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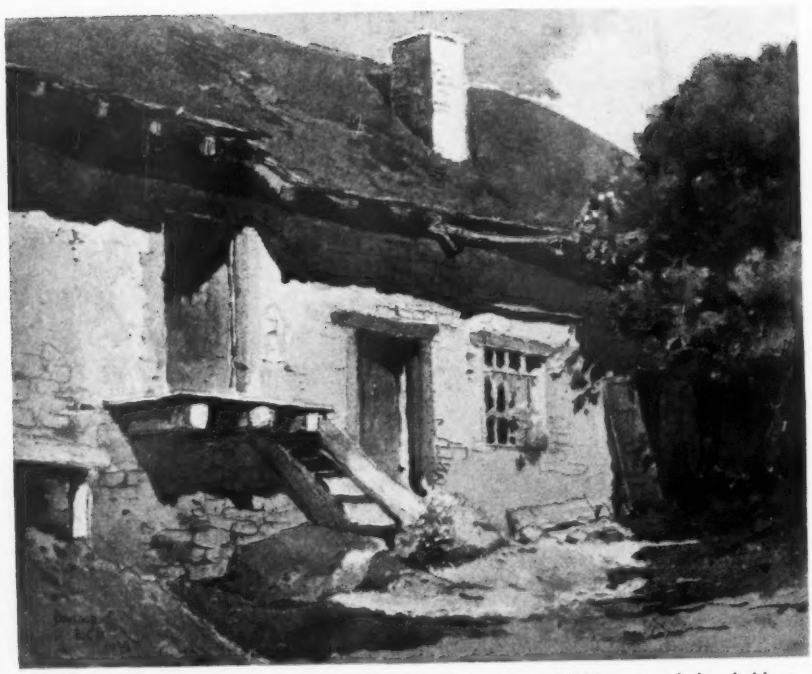

BOULOUD. Water-colour by Sir Guy Dawber from the exhibition now being held at Portland Place

JOURNAL OF THE
ROYAL INSTITUTE *of* BRITISH ARCHITECTS

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Journal

REGISTRATION: THE R.I.B.A. AND THE MAINTENANCE OF STANDARDS

During the last few months there have been several notes in the R.I.B.A. JOURNAL dealing in one way or another with the Architects Registration Act. Most members of the Institute know by now the general provisions of the Act and in particular that any architect practising in Great Britain prior to 29 July 1938 will until 1 August 1940 be entitled to register without having to pass an examination.

There is another very important aspect of registration, less evident perhaps, but which demands the closest attention of R.I.B.A. members and those outside who believe in registration. The R.I.B.A. is the largest architectural society and as such bears the chief responsibility for what ultimately is made of registration. We all know well enough, and it is often said, that the mere presence on the Statute Book of an Act registering architects achieves little or nothing. This Act as much as any other is not an end in itself but a means to an end, and, as with almost any Act, it is within the power of the people of the country or those who administer the Act to make it a dead letter or to give it life.

The Registration Act can have all the life we choose to give it by seeing that it has the confidence of the profession and of the people of the country. What the Act becomes is primarily a matter of our responsibility.

The central achievement of the Act is not the mere registration of the word " architect " but the assurance that it can give that the word " architect " will carry a special meaning. After August 1940 all entrants to the register must pass an examination. We are justified in being jealous of the prestige of that examination because the whole repute of registration depends on it. If it is allowed to degenerate into a test having a standard any lower than that now maintained, the whole purpose of the Act will be emasculated.

The quality of the examination will be the test not only of the entrants to the register but of the very sense and usefulness of the register itself.

At present registration is in an intermediate stage. The full force of the Act does not yet apply and admission to the register is allowed to all architects in bona fide practice as such. That is a reasonable provision to establish the administrative machinery in this early stage on a broad and democratic basis.

But in a year's time the full force of the Act will apply, to exclude all but those who pass the examination. It is clearly in the interests, as has been emphasised above, of the profession and the country generally to make the test a real test of good qualification, nevertheless it would be idle to disguise the fact that pressure may be exerted to lower the standard. To such pressure the R.I.B.A. must always be in firm opposition. Nothing must be allowed to pass which will weaken the status of the profession and nothing can be better calculated to do it than a lowering of the standard of registration.

The strength which the R.I.B.A. possesses, as a body determined to uphold the standard, is not merely a moral strength, but one which ultimately depends on the strength of its representation on the Architects' Registration Council ; this is governed directly by the size of its membership. It is therefore vitally important that every registered architect who is in agreement with this policy should give his weight to the preservation of the standard by coming within the membership of the bodies represented on the Council, which are firmly of this intention.

THE COTMAN AND DAWBER EXHIBITIONS

Two exhibitions opened at the R.I.B.A. on Tuesday, 6 June :—The Cotman Exhibition in the Henry Florence Hall and the exhibition of water colours and sketch-books by Sir Guy Dawber in the Reception Room. The Dawber exhibition was opened by Sir Edwin Lutyens, P.R.A., who spoke of his long association and personal friendship with Sir Guy and of Sir Guy's work as an architect and artist. The Exhibition,

besides giving evidence of Sir Guy Dawber's skill as a water colourist, is a delightful cross-section of his travels and his personal architectural enthusiasms. These are things drawn because he liked the look of them ; they are natural, very human and not at all " professional." There is an interesting contrast in this between Sir Guy Dawber's drawings and the Cotman drawings across the landing. Cotman's are much more directly architectural, more subject to a " routine." The contrast, apart from that afforded by all the differences of a century division in time, is partly this contrast between routine and recreation, more fundamentally it is a contrast between periods. Cotman, by no means incidentally the finest architectural draughtsman of his age, was part of Regency England when Romanticism was still controlled by a classical discipline and eyes were looking fresh at the countryside and at architectures that had been neglected for three centuries. Cotman, the artist, looks at buildings with a sharp-visioned accurate architectural eye, Sir Guy Dawber, the architect, looks at the buildings he paints with an eye alert to picturesqueness and artistry. Sir Guy's work represents the maturity of several generations of cultivated interests ; travel in France, Germany, Italy and England with a taste for a pretty view and the ability to record it with a technique exactly in accord with the interest. His is pictorial as opposed to historical romanticism. Sir Guy Dawber's pictures cover his travels since 1889, the first year from which there are examples, until 1937 when he and Lady Dawber made their last continental tour together. In addition to the drawings there are photographs of a number of his buildings and Gerald Kelly's portrait.

The Cotman Exhibition

The Cotman Exhibition is open until 28 June. Almost all the Cotman drawings from the Kitson bequest are on view, but it has been decided to omit the interesting supplementary drawings included in the bequest : a drawing by John Constable and drawings by Cotman's son Miles Edmund, Mary Anne Turner, John Thirtle, Henry Edridge and others. These can all be seen in the Library. The Catalogue, as we mentioned in these coloumns in the last Journal, has been edited by Mr. Paul Oppé, who has written a five-page introduction, and who has given also a very large part of his time to the organisation of every detail of the exhibition. The Exhibition is enormously worth a visit, because although all members can, of course, see the drawings at any time in the Library the opportunity will not come again to see the whole lot displayed beautifully and spaciously.

Lord Lee's Art Gallery

Members are reminded of the important evening meeting on Thursday, 15 June, when Lord Lee of Fareham will describe his new picture gallery at Avening. Among those who hope to be present are the directors of several of the great art galleries and institutes, including Sir Kenneth Clark, who will be in the chair, Dr. John Rothenstein, Mr. Louis Clarke, of the FitzWilliam Museum, Professor Boase, of the Courtauld Institute, Dr. Saxl, of the Warburg Institute, Mr. Kaines Smith of Birmingham, Professor Philip Hendy of Leeds, Mr. P. H. Jowett, of the Royal College of Art, and, among others, Sir William Rothenstein and Sir Robert Witt. An audience which clearly enough will be able to produce a most authoritative and interesting discussion. The audience of art gallery experts without the leavening influence of architects will be only half an audience, so we hope that a large number of members will be able to attend : Thursday next, 15 June. The evening starts at 8.15 when coffee will be served, Lord Lee's talk will start at 9, and afterwards there will be refreshments. The meeting will provide another special occasion for seeing the Cotman drawings.

15th International Congress, Washington

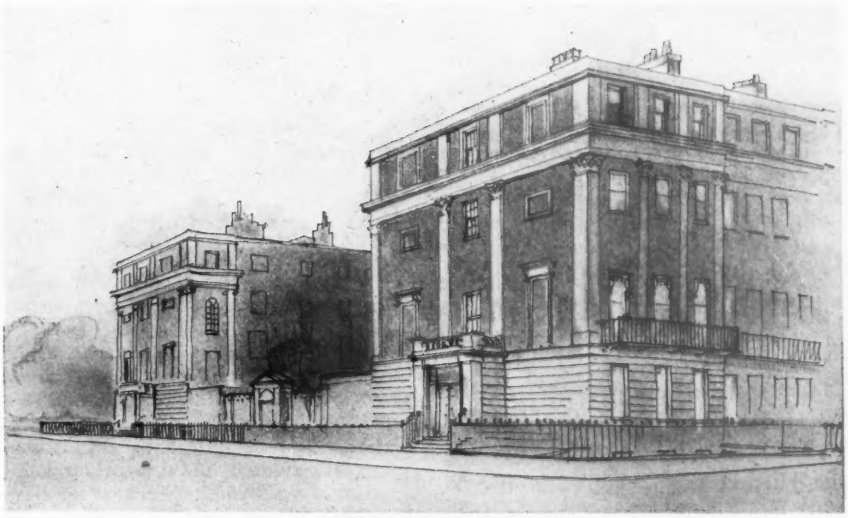
A notice about the 15th International Congress of Architects, to be held at Washington between 24 and 30 September, was published in the Journal of 20 March. Applications for membership of the Congress should be made *soon* to the General Secretary, Lt.-Col. H. P. Cart de Lafontaine [*F.*], 11 Suffolk Street, Pall Mall. The recommended boat for the outward journey is the *Champlain*, which leaves Southampton on 16 September and reaches New York on 23 September. The fares for cabin, tourist and third class on the Champlain outward journey are £41, £27 7s. 6d., and £18 7s. 6d. In addition to the themes for the Conference announced in the previous notice there will be a fifth theme : Should public authority be clothed with power to reject plans as artistically unsatisfactory rather than as at present for purely technical reasons only. Also there will be two other " studies " : Architect's copyright and comparison of fees in different countries.

" Garden and Landscape " Exhibition

An exhibition of " Garden and Landscape," organised by the Institute of Landscape Architects, will be opened by the Hon. David Bowes-Lyon at the Royal Institute of British Architects, 66 Portland Place, W.1, on Wednesday, 21 June, at 3 p.m. The exhibition, which will remain open until 1 July, has as its theme " Recreation," and the illustrations cover all aspects of landscape architecture, varying from small private garden schemes to large-scale regional planning. Special problems, such as play parks, holiday camps, factory surrounds, seashore development, are dealt with, and the exhibition states the case for planned amenities in town and countryside.

A.B.S. Dance

A leaflet is enclosed with the van delivery of this number advertising the A.B.S. Dance at the R.I.B.A. on Friday, 30 June.



Gordon Place, Bloomsbury, c. 1810

THE RISE AND DECLINE OF THE TERRACE HOUSE IN ENGLAND

By H. J. HITCH [A.]

A THESIS SUBMITTED IN THE FINAL EXAMINATION

. . . "*the whole purpose of civilisation is to build beautiful cities and to live in them beautifully. . . .*"

PROFESSOR W. R. LETHABY

INTRODUCTION

Civic building is one of the most obvious and direct expressions which register the condition of a society and the degree of civilisation. Civic buildings are those erected by a people living together in co-operation for their mutual benefit to form a community. The dwelling houses and streets which they inhabit constitute by their overwhelming numerical predominance the general fabric on which a civic expression in the building sense is founded. . . .

The author is not aware of any book or even a chapter which has yet been devoted to a moderately comprehensive consideration of the history of houses built in terrace formation, and considerable difficulty has been experienced in obtaining collated information having a direct bearing on the subject. In many cases the precise dates of terraces were unobtainable. Examples are mentioned for the bearing which they have on the subject and there are some terraces which, although well known, are not introduced because the author was unable to obtain photographs or information concerning them. The illustrations are some of the author's drawings from the original thesis.

In different periods restrictions imposed on individual owners have produced houses of similar fenestration and a common skyline, but some of these examples fall short of success owing to the original lack of a complete conception embodying the two façades for the length of the whole of that portion of street.

A block between two streets related to the opposite façade and the remaining length of street conceived as part of a single architectural composition achieves the finest form of civic design. Such a block consisting of domestic dwellings is known as a terrace of houses. The *New English Dictionary* defines a terrace as "a row of houses above the general surface or on the face of rising ground," and adds that it is improperly used to imply a row of houses of uniform style. As complete uniformity in the sense of standardisation forbids essential articulation in the form of punctuation and inflection, which are necessary to the development of unity, the same meaning will be employed here to

signify the type of house just described.

Many examples illustrated in the text may not be complete blocks between two streets, but they will be sufficient example of the qualities described, truncated from their ultimate form by necessity or expedience.

A crescent of houses, although not always constituting a street in the complete manner described, is almost invariably planned in a good setting and consists in the best examples of a reasonably standard unit and yet controlled in the ultimate form to produce a single composition; as such it has an essentially urban character.

The town square evolved in the late seventeenth and the eighteenth century was a typical element in the development of the town and although consisting of four façades and therefore not of the street proper, nevertheless was often of high civic character and formed a definite contribution to the tradition of civic design. On this account both the square and the crescent are included within the scope of the subject.

HISTORICAL OUTLINE

1. EARLY EXAMPLES UP TO 1666

During the Middle Ages in England the civil population was relatively small, but there is little evidence in the early work in our Mediæval towns of any degree of civic consciousness. The royal household and feudal lords, when undertaking building, considered defence before domestic convenience and any architectural ambitions were concerned with the means of consolidating their individual military strength.

The ecclesiastical communities contained within their monasteries, courts and dormitory blocks of a domestic nature rather than individual houses and the same may be said of the Oxford quadrangles and Cambridge courts of the fifteenth century.

The rise of the merchant classes and the companies of craftsmen greatly increased the population of the towns and these people had a little more personal interest in the appearance of their towns than their royal and feudal patrons. Thus, the smaller dwellings had more attention given to them and many became grand and excellent examples of carpenters' and woodcarvers' work. The majority were constructed of timber framing and plaster filling, exhibiting distinctive and varying tendencies of planning and design. There is little evidence to show that houses were considered in groups and designed as such, but mention should be made of alms houses which, although domestic buildings of a rather special form, were, nevertheless, sometimes built in blocks containing several units of similar design. Conclusive evidence would be difficult to obtain, but their example may have had a possible influence in normal domestic building.

After the dissolution of the monasteries many of the monastic buildings were converted into tenements, and there occur in the records of that time many comments on the overcrowding of the houses and tenements, particularly in London, which was now expanding rapidly, its growth accelerated by the influx of foreigners from abroad and the provinces. Many large houses were split up to form tenements, but the first record of houses built in a block occurs at about A.D. 1500, when the Sheriff of London, at that time Thomas Wood, built for his Company Goldsmiths Row in Cheap, consisting of " ten fair dwelling houses and fourteen shops all in one frame uniformally builded four stories high". Old houses in Oak Street, Norwich, built in the fifteenth and sixteenth centuries, consist of similar units repeated some two or three times, and it is probable that there were numerous examples elsewhere.

In 1588 a proclamation was issued prohibiting the building of any future houses unless they were standing in four acres of land. Families were now to inhabit separate houses and lodgers were not to be taken. It is true that the proclamation was not very rigorously enforced, but the conditions laid down coupled with the still rapidly increasing population did create in London a market for houses and a new value in land. Both of these are factors congenial to speculation and were responsible in the next century for the considerable speculative building which occurred.

In 1607 a proclamation required that all new houses in the City of London erected on old foundations were to be rebuilt in brick and stone on their front walls, and that all new houses on new sites were in addition to be built in a uniform style and approved by the Aldermen of the land. A further proclamation of 1619 stated that shops were to have brick or stone pilasters and their window openings to be arched, other windows were to be square-headed and greater in height than width, except those in a half-storey. The reason given for this second proclamation though fundamentally constructional was to beautify and produce a certain uniformity in the streets. It would appear from these two proclamations that the responsible people were concerned with the untidy appearance of the City and desired to promote building which had more grace and orderliness. Although the author has found little evidence of the effect of the proclamations, it is of interest to read of remarks made by foreign visitors a little later commenting on the pleasantly formed streets of London and mention made of the regularly arched shop windows.

The more obvious circumstances which led to the evolution of the terrace house are concerned with the development of the town square, and begin to accumulate at first in London. The Duke of Bedford decided in 1630 to build on part of his London estate originally occupied by the old convent belonging to the Abbey of St. Peter and commissioned Inigo Jones to lay out the land in the form of a square or piazza. A very successful prototype was the Place des Vosges in Paris, and consisted of a square bordered on each side by a single block of houses of equal size constituting the unit on which the façade was designed. The pavement ran behind an arcaded front wall of the houses. The central space was used for sporting events and public festivities. The Covent Garden Piazza was constructed in stone and conceived on similar lines, save that only two sides were occupied by houses, the other two containing gardens and later the Church of St. Paul on the west side. Here, as in the Place des Vosges, the ground floor was arcaded to provide a broad covered promenade for the public, the houses being occupied by the nobility.

In spite of the proclamation of 1588, it was a common practice for houses in towns and villages to share a party wall, but there is little evidence to show that any concerted effort was made to provide a common façade. The significance, however, of the speculation, for such it was, by the Duke of Bedford, was that houses were individually subordinated to the façade of the whole block having at ground floor level the dominant and unifying feature of the arcade. Further, the façade as a whole had a relationship to something greater, namely the Piazza, which in turn was not an expression of the omnipotence of an individual but a contribution to the character and amenity of the whole town. It is an early example of civic design not in a royal residence or large communal establishment but applied to domestic dwellings.

A quotation from the Patent Roll, mentioned in the L.C.C. London Survey Report for St. Giles, states that a man named Newton intended to build in about the year 1635 on a portion of Aldwych Close, " 14 fair houses or tenements to conteyne in front one with another near fortie feete a piece fitt for the habitacon of able men." Later Bagford in attributing this block to Inigo Jones, mentioned that the street was to have formed one side of a future square " in the middle whereof was left a niche for the statue of Henrietta Maria, and this was the first uniform street and ye houses are stately and magnificent."

On the return of Charles II to London a large number of his early friends and supporters who followed him found that the merchant classes had supplanted them in the city, and so they settled further westward, nearer the court at Westminster. The return of the nobility created a fresh housing problem, for although the wealthier of them built large detached palaces in extensive gardens west of the city, there were many of the lesser families and the large number of retainers and traders to be housed.

2. 1666-1750

The series of plagues culminating with the Great Plague of 1665, followed by the opportune Great Fire in the following year were events which did much to shake off the last clinging remnants of the mediaeval outlook of the population in London.

In 1667 Parliament passed a series of rules to govern the rebuilding and future development of London. From the civic point of view the most important requirement was that all new buildings were to conform to definite heights dependent on the width of the particular street in which they were situated. The old streets were widened and now varied from 16 to 100 ft. across. The second important requirement governed the thickness of exterior and party walls, which were both to be of prescribed thickness dependent on their height. All exterior walls were to be of brick or stone, and it is important to remember that at this time varieties of red were the only type of bricks obtainable. Door and window heads were also required to run through at the same level from house to house.

These rules, which Wren helped to draw up, were bound to produce a more uniform façade in the streets, but another factor which was beginning to make itself felt was the growing respect by society for classical architecture, either by reason of a genuine appreciation or as a result of the " rule of taste " which was gradually being evolved and imposed by the more cultured members.

Another factor which may have been present, but not so easy to assess, was the psychological effect of the recent catastrophes on the public at the time, and the resultant desire to avert the further outbreak of fire and plague, which probably meant that the advantages of the wider streets and cleaner appearance of the new buildings were appreciated by the citizens.

All the events outlined above fully established the great need for new houses and the pecuniary opportunities created were seized by many ; on the one hand by the landowning nobility having definite cultural standards and on the other by mere speculators and small builders, neither of whom gave much consideration to architectural details, except as a selling factor for certain classes of society.

Many of the fields and meadows on the outskirts of the city were leased for building, and as these spaces were generally popular resorts for public recreation and entertainment, building schemes met with much opposition. In order to build on the remainder of Lincoln's Inn Fields an agreement was made in 1657 with the Society of Lincoln's Inn that a permanent open space was to be retained in the centre and that new houses should conform in height and proportion to

those already erected. Here can be seen the desire of the Society to acquire a certain degree of unity and to retain their early amenities in the Fields. It is possible that they had in mind the success of the Covent Garden Piazza.

After the active intervention by the Society of Gray's Inn, Red Lion Square was laid out in 1684 by Nicholas Barbon, one of the greatest building speculators of the century. Barbon had little interest in the architectural pretensions of his houses, but was more concerned with the erection of as many as possible on the land, and the narrow-frontaged house which was to be the keynote of the town house can be seen in the early prints of this Square. Bedford Row, built by Barbon at the same time, is a wide street and contains houses reproduced uniformly throughout its length. It can be seen in its main essentials to-day, although the window details are now varied and the doorways are of a better design introduced at a later date.

The methods employed by Barbon in building at a high density in order to obtain the maximum return in rents, now became a common form of speculation, an activity which was largely responsible for the terrace house, which by its very economy of site planning produced the desired speculative results for the particular classes of dwelling considered. These speculations have produced at all periods both fine and mean houses, but in the nineteenth century the principal result was to contribute to the general degradation of the terrace house into a sordid profit-making affair unredeemed by any architectural qualities, and its ultimate ostracism by society in the present century.

A seventeenth-century terrace of unknown date occurs in Queen Street, Hammersmith, which consists of fifteen small houses of simple unpretentious character, having tiled roofs and dormer windows in the attic storey. It shows little of the growing influence of the Renaissance. The terrace in Paradise Row (Nos. 2-7), Chelsea, built in 1691, however, has a scholarly classical elevation and is a typical example of the Wren period. Cheyne Row, Chelsea, built in 1708, is another very pleasant example of the same period, consisting of three storeys and a basement. Both terraces show the new spirit of Renaissance in their regular, well-considered façades.

At the close of the century many of the London squares were commenced and contemporary prints indicate that in many instances houses were designed together as a single façade as in the east side of Grosvenor Square, started in 1695.

The house now became deeper on plan in relation to the width of the frontage, and the problem of lighting the centre was solved by placing the large top-lighted staircase and landing here, the powder room and closets being placed in the narrow projections at the rear, as seen in the plans of the terrace in Cheyne Row.

Two Acts passed at the beginning of the eighteenth century contained clauses which did much to produce further uniformity of the street façade. The Act of 1707 required that parapet walls should be continued 2 ft. above the foot of the roof, and the Act of 1709 made it compulsory to place windows in a $4\frac{1}{2}$ in. reveal, and prohibited the use of wood cornices unless metal covered.

In the last century the rules of Palladio were acknowledged in spirit, but in the first half of the eighteenth century they were more literally accepted and their application introduced a heavier character into façades. In London few particularly good terraces were produced, although several squares were started. Dover Street, finished in 1750 by Sir Robert Taylor, was probably the most important terraced development representative of the work of these years, but for more significant work of the period one must turn to Bath.

The Woods at Bath

At the commencement of the eighteenth century Bath was becoming a fashionable town and popular spa, as a result of the efforts sponsored by Ralph Allen, of Beau Nash, in the social sphere and the planning projects of John Wood. In 1729 the east side of Queen's Square was commenced to the designs by Wood; this was probably the first time in England that the composition of a central pediment and columns and projecting end blocks was applied to unite a series of houses. The Corinthian order has been employed and the columns occupy the first and second storeys, the whole composition being mounted on a rusticated base in which the individual entrances are set. For easy identification such a composition will hereafter be described as a palace façade and will be considered again.

South Parade, started by John Wood in 1743, is an example of the palace façade applied to houses along a street. In this case the portico and end blocks are merely small breaks in the wall face and the columns are omitted.

In 1750 Gay Street was started and in the same year the Circus. The latter planned, as its name implies, in a circle is divided into three blocks, and consists of houses equal in size and general planning. The façade is divided into three horizontal divisions and vertically composed of three sets of coupled columns, Doric, Ionic and Corinthian respectively, and is rather a prosaic exercise of Palladian rules. Between the years from 1767 to 1775 the Crescent was completed by the younger Wood. It is a fine composition parabolic on plan and the façade consists of a row of three-quarter detached Ionic columns extending through two storeys and mounted on a base at the ground floor. The two end houses are significantly designed to produce a good termination of the long curve. It shows a freer handling of the Palladian principles than the works by the elder Wood, and in mass it sits well on the site,

possessing an effect suggestive of the grand, cultured society which originally lived there, and yet retains an essentially domestic character. Later in the century about 1783 Pulteney Street was built to the designs of Thomas Baldwin. The façades are simply treated, having shallow pilasters and pediments at intervals along the wall face. The street is a hundred feet in width and some 1,100 feet long, the vistas at the end being completed by the Holburne Museum and at the other extremity by cross roads which enter it and the Square formed diagonally of the main axis at the junction. The street has a definite continental spirit rarely found in England.

3. 1750-1830

From the middle to the end of the century the Adam brothers' activity proved the greatest influence over contemporary work. Other influences such as the research by Stuart and Revett, and the work of Leverton and Henry Holland all added to the general introduction of Greek principles and refinement of detailing applied to the exterior treatment and to internal planning and design.

The Adam Brothers

The work of the Adam brothers in London included terraces such as the east side of Fitzroy Square, the houses in Mansfield Street and Portland Place, the last two being completed from 1770-80. One of the few terraces in the literal sense to be built in London was the Adelphi, erected by the brothers in 1768, where the houses and streets are both raised upon vaulting above the natural slope of the land down to the river. The project was a vast undertaking, as a speculation architecturally successful but an embarrassment to the architects who themselves financed the scheme.

Between 1775 and 1780 Bedford Square was built to the designs of Thomas Leverton. Bedford Way, Montague Street and Torrington Square were contemporary, and the district became popular among the business families and merchants of the city. Tavistock Square built in 1806 and Gordon Square built a little later, departed from the more severe style of Leverton's work in the locality and follows the Adams' use of stuccoed pilasters. Both are more masculine in character than the work by Adam, and yet lack the severe and almost æsthetic form of Leverton's work. Considerably more attention is given to the treatment of the end elevations and the linking walls between them.

For some years now many of the London houses were built with locally burnt yellow stock bricks instead of the red varieties, although window and door arches were still turned with red rubbers. The combination can be seen in the work of both the Adam brothers and Leverton. The Adelphi, Portland Place, and the Bedford Estate were built of the yellow stock, and it is possible that greater homogenity of surface was obtained by their use on the long, stucco-enriched façades.

Bedford Place, London, W.C.

In planning, the staircase is no longer lit by a window in an external wall where another room can be placed, but is relegated to a position in the centre of the house and obtains its light from a skylight in the roof. Such a light is of more value in practice when used in conjunction with a stair having an open well, and the general effect was to open out the staircase well both in the large and smaller house ; with a wider main landing, there is added a background for the social manners characteristic of society at the time. A small servants' stair is now sometimes incorporated in the plan. A claim is made that the Adams first introduced the above method of lighting the staircase in terrace houses in Edinburgh, but it is, nevertheless, found in some of the earlier houses in the Crescent at Bath. An interesting terrace in Bologna built in the sixteenth century and attributed to Vignola also contains the toplit staircase in the centre of the house.

The End of the 18th and the Start of the 19th Centuries

Like all other buildings since the Renaissance the terrace house has been subjected to the whims of architectural fashions and the façade becomes to some degree a selling factor to a rising class of comparatively wealthy people, lacking the cultural tradition of the aristocratic families who, in the previous century, were the only people able to discriminate in matters of taste. This new class was liable to be attracted by the particular style in vogue, but their financial resources forced them to accept the second rate work found in the new suburbs developing round the bigger towns. In London these are suburbs such as Clapton, Camberwell and the fringes of the Old Kent Road, Denmark Hill, Blackheath and Greenwich. Some of the better

work in these new districts is the terraces designed by Michael Searle, such as Surrey Square in Southwark, built in 1794. The Paragon at Blackheath, its namesake in the New Kent Road, and the Circus at Greenwich, were all designed by Searle about 1790. It is significant that these large houses built as a speculation, although detached, are linked at ground floor level by colonnades, and they achieve a certain further degree of unity by being set out on curved frontage line.

As early as 1765 small squares were being built in Edinburgh by James Brown to meet the gross overcrowding of the existing tenement dwelling. Neither these nor George Square, executed in the following year, had an appreciable degree of unity. It was not until 1791 that the Adams designed the façades of Charlotte Square. In disposition of masses these latter resemble the east side of Fitzroy Square in London, but they were not actually completed until after the death of Robert Adam in 1800.

The development from 1815-35 of the consecutive New Towns, including the designs of Playfair, were Greek in style, but rather heavy and dull in spirit. The consideration and care given to their layout, however, was typical of a spirit present in the building work in other towns such as Bristol, Exeter and Plymouth and later, after the Napoleonic wars, in Clifton, Cheltenham and the coast resorts such as Brighton, Hastings, Ramsgate and Scarborough.

JOHN NASH

At the close of the first decade of the nineteenth century, John Nash began to see the fruits of his acquaintance with the Regent take definite form. His early works were principally small houses and country villas, and his first commission from the Regent was in a private capacity and connected with improvements to the Brighton Pavilion. In 1812, however, as Deputy Surveyor General to the Crown, Nash started to build Park Crescent, the first portion of a scheme for linking Carlton House and the new road. Nash was not known to have any great architectural principles, but on his return to London from Wales he was particularly consistent in his use of stucco, a facing surface which he first employed during his earlier sojourn in London.

Park Crescent, at the north end of Portland Place, was curved on plan and had a colonnade at ground floor level, and, like the majority of his work, whether designed by himself or one of his assistants, it maintained an excellent scale and formed a good link with the terraces round the Park. The Quadrant (1818), although containing shops on the ground, basement and Mezzanine floors, and not really part of the subject, is a brilliant civic conception of a semi-domestic character and particularly worthy of mention here.

The terraces round the Park were completed in 1821, were all conceived on a grand scale, and attention was given to their ultimate scenic effect in relation to the Park and the buildings in it shown on the early schemes. In the York terrace the entrances are placed at the rear and the main front to the Park thus freed for a broader architectural treatment.

Regent Street itself was probably the longest street to be designed by one architect in England, and Nash realised the monotony which would result if the colonnade of the Quadrant were carried along the remainder of the street ; instead the upper part was designed as a series of separate blocks of varied design, relying on the one facing material to maintain the continuity of the street. The land between each pair of side roads was treated as one block and the unit of an individual house generally neglected and completely subordinated to the conception of the whole composition.

Nash himself controlled and handled the problems of acquiring the properties affected by the new street, and was responsible to the Government for the eventual financial success of the scheme. Even at the time it was extremely difficult to gain consent of the landlord or control of the necessary property, but to-day, in spite of the unquestioned success of the undertaking from every point of view, the precedent is generally ignored, if not actually ridiculed, particularly in our larger cities where the application of such a solution of architectural chaos is most needed.

ROMANTICISM

Carlton House Terrace, like the Adelphi a true terrace in the literal sense, in its magnificent scale and scenic effect, is probably the most important London building executed by Nash. The side facing the Park is freed of all entrances and the principal rooms have access to the broad walk in front supported on the Doric base. Nash's conceptions come as a change from the eighteenth-century tradition in the predominance given to scenic effect before the orderliness of the compositions in the previous century. The change is contemporary with the growing romantic influence to be seen from designs for villas and rural cottages in the books of Gandy, Atkinson, Thomson and John Plaw in the early part of the century. Whilst his idiom is derived from the Palladian and Greek schools, together with contemporary interests of Soane and French work, his romantic conception is probably a result of his association with Repton and the new movement already mentioned.

The majority of people in London were still leading a genuine town life and although the semi-rural settlements were developing another great speculative venture was launched by Cubitt, a builder of the time, in the district north-west of Victoria, to be known of as Belgravia. Belgrave Square was designed by Basevi

Terrace in Chester Square, London, S.W.

in 1825. Eaton Square, Chester Square and Grosvenor Crescent followed, all the work being finished in stucco and showing both Greek and Roman influences. The terraces at the east end of Chester Square are similar in spirit to the brick terraces of the previous century in Bloomsbury, and are some of the few completely stuccoed terraces in London which do not rely on a more lavish and pompous surface treatment.

In the outskirts of London, such as the locality of the Walworth Road and Denmark Hill, occur brick and stucco terraces which are in expression similar to the work in Bloomsbury. The de Crespigny Terrace and Denmark Hill are examples built in 1821, and show that brickwork was still favoured by some in spite of the vogue created by Nash.

Bristol and Clifton

Bristol was in the seventeenth century an important seaport in contact with the continent and London by sea, and also by land well connected to Bath. As a result of these links there is much of interest in the houses of the town.

Orchard Street, built in 1716, has a uniformity of height and proportion which makes it appear likely that contemporary acts and buildings of London were known in Bristol. In these houses can be seen the local method of indicating the party wall by the projecting stone quoins throughout its height.

Brunswick Square (1769) has façades each designed as complete compositions in which this indication of the party wall is employed. Although commendable for its civic spirit, the rather crude handling of details shows imperfect experience in handling a classical façade. Portland Square built in 1788 is again a complete composition and shows a great improvement in detailing, belonging to the formal classical period, although the doorways appear to owe more to the Palladian influence from Bath.

Clifton was developed at the end of the eighteenth century as the residential quarter of the wealthy Bristol merchants and the new terraces situated on the heights overlooking the town have a similar spirit and style to those of the terraces in the coastal resorts growing at the same time. Such an example is the Royal York Terrace started at about 1790 and completed after the Napoleonic wars. It was faced with stucco and is a true terrace having a wide promenade with a fine view over the town. The basement floor is planned at the same level as the road and runs under the promenade, to provide an access direct to the roadway.

West Mall, a long terrace built of Bath stone, has a good individual unit each having a first floor covered balcony, and is planned on an axis at right angles to the Gorge at this point, with a narrow garden running down the centre.

Harley Place is also built of Bath stone. In scale and proportion it has a certain affinity to Bedford Square. The Paragon, a small crescent built about 1811, has some interesting entrances which compare well with those in Wellington Road. Frederick Place is a typical example of the standard three storeys unit with a first floor balcony and is very well detailed. Victoria Square consists of four sides on three of which are terraces each a little different in design. They illustrate a change in classical work, being so ponderously detailed as to lose the value of the window opening as an essential element of the design.

Buckingham Place, in Queen's Road, is also a later work and shows an interesting departure from the normal façade by having the main wall face set back at first floor level and a stone verandah formed. The detached villa was now fast growing in popularity and the terrace development was checked by invasion of the town.

By the Seaside

In 1789 George III first patronised Weymouth to start the rise of the fashionable coastal resort, but the greatest incentive came from the Regent in his patronage of Brighton, a small village which grew to a large town in the space of some forty years, owing to the increasing numbers of the London society which followed him to the coast.

This was an excellent field for speculation and many terraces were built in the new resorts to accommodate the summer visitors. It is to be surmised that the attractions of the sea were of themselves insufficient compensation for the loss of the comforts of London, and the desire for some suggestive link with the capital

may be the explanation of the formal terraces in the first quarters to be developed. The houses at first were occupied by single families and their servants, whereas to-day the same buildings in the majority of cases are now found large enough to accommodate whole boarding houses.

The terraces were generally finished in stucco, but the Royal Crescent at Brighton, built at the turn of the century, was faced with a black glazed brick, this besides being one of the earliest terraces was also one of the first to incorporate the bay window, later to become a common feature of houses in all resorts. With health as the principal advantage of living near the sea, it is natural that provision for some living in the open should be made. The segmental bay windows and balconies provided direct access to the sun and breeze from the principal rooms on the first floor.

Brunswick Square and Terrace at Hove, a stuccoed terrace, started in 1823 and finished 20 years later, is designed on academic lines, and consists of four storeys, the first and second being divided up by Corinthian pilasters, and a continuous cast iron balcony runs the whole length of the front. The two sides of the square contain bay-windowed houses with the entrance on the side facing away from the sea.

Pelham Cresent, Hastings, is an interesting composition, semi-circular on plan, the centre occupied by a chapel. The ground floor level of the houses is the same as the chapel, and a steeply sloping road serves the houses, the entrances of which are obscured from crowds by a screen wall. The first-floor rooms are emphasised by crenoline balconies which add a gay character to the composition. A product of the society which preferred in London the more literal classic expression of the Park Crescent and adjoining terraces, the spirit shown in this crescent is of the same society relaxed in a gay ingenuous mood, when its members encouraged the practice of surreptitious bathing in the sea water. The bigger squares are usually situated on rising ground facing the sea on an open side, as at Warrior Square, St. Leonards, Regency Square, Brighton, and Brunswick Square, Hove. The sides of the squares contain octagonal or segmental bay windows rising in steps, and the side facing the sea being on a comparatively level site is treated with a horizontal emphasis. The Marine Esplanade at Dover occupies nearly half a mile in frontage and is emphasised horizontally by a continuous first floor verandah. Scarborough, Sidmouth, Weston, Weymouth, Ramsgate, Dover and Deal all contain similar work retaining the eighteenth century tradition of terraces and squares bordered by continuous well-proportioned façades. By the middle of the century the vogue for detached and semi-detached villas established itself in the coast resorts and the grand planning schemes which started so well were shelved and forgotten amid the enthusiasm for semi-ruralised development. At first the new development was possible only for the larger property such as commenced in Bournemouth in 1850 and the smaller property continued to be produced in terraced form of rather coarse design, as seen in Seafield Road and Osborne Villas, Hove, both built about 1852.

Munster Square, London, N.W.

4. 1830 TO THE PRESENT DAY

Industrial Housing

Little has been said yet of the terraces built for the poorer classes. These come in the category of fourth or fifth rate houses and did not receive a great deal of attention in towns, although the acts already mentioned covered all rates and their requirements had the same influence on these small houses as on the larger property. The façade of the Bloomsbury property was in character seen in the smaller London terraces such as those in Park Street, Camden Town, built in 1820, and also to be seen in the area adjacent to Munster Square. Their unpretentious form has the grace and dignity of the larger houses of the period.

The growth of industrial centres and the work obtainable there attracted people from the rural districts, and their accommodation created a new housing problem. The promoters of the new industries were not members of the higher aristocracy, and therefore never had the responsibilities of maintaining large estates and the housing of the workpeople dependent on them. Nor did they possess the cultural tradition and art of discrimination of the aristocratic families. The problem of housing their employees was considered as an unfortunate but necessary expenditure of capital showing no profits. Consequenty they provided only the mere

COMPARATIVE DIAGRAMS OF UNITS EMPLOYED IN THE STREET FACADE

FROM LEFT TO RIGHT, TOP ROW : *Queen Street, Chelsea, early 17th century ; Cheyne Row, Chelsea, 1708 ; Orchard Street, Bristol, 1716 ; terrace in Canterbury, early 18th century ; Mansfield Street, W.1, 1770 ; Bedford Square, London, 1780*

CENTRE ROW : *Montagu Street, W.C.1, late 18th century ; Park St., W., 1820 ; de Crespigny Terrace, 1821 ; street near Regency Square, Brighton, c. 1820 ; Whichcote St., Lambeth, early 19th century ; Trinity Square, Lambeth, 1825*

BOTTOM ROW : *Whittlesey St., S.E.1, mid-19th century ; Roupell St., S.E.1, mid-19th century ; Osbourne Villas, Hove, 1852 ; Seafield Road, Hove, 1860 ; terrace in Bedford Park, 1880 ; typical Victorian bay-windowed house*

shelter necessary for a purely physical existence and a low standard of hygiene.

The terrace house in its most compact form was the obvious solution from the point of view of the industrialist, and there are countless blocks of ugly and insanitary houses in these new districts to testify the grudging spirit in which they were erected. The back-to-back type was the most compact of all forms, each house having three party walls instead of two, there being a similar house at the rear. These were being built as early as 1825 in Leeds and later in towns such as Huddersfield, Bradford and Stafford.

In the previous century the traditions and rules of taste established by the aristocracy were accepted and enthusiatically followed by the wealthy merchants of the time, but the application of these rules weakened as a result of the power and independence of the growing numbers of wealthy people created by the Industrial Revolution. Contributory causes were also the loosening of the classical principles by Nash and his contemporaries and the general growth of the romantic movement.

The higher circles of society were still occupied by the old families and the new possessors of wealth realised that to have access to those higher circles a patronage of the arts and a display of culture were essential parts of the equipment for an ascent, and architectural possession became them rather as badly-fitting costumes.

Architects themselves were becoming more concerned in vigorous academic controversies over styles. Architecture was considered only within the framework of styles, buildings being merely the opportunity for their application, and not as a responsibility in contributing to the solution of the problems of society.

Changes in the plan also occurred in the middle of the century. These changes, which were possibly the result of the greater scope and freedom of planning obtained in the detached house, which was for many now a town house, consisted principally in the duplication of rooms for the separate use of individual

members of the family. The kitchen quarters were often arranged on the ground floor instead of in the basement and and this may be attributed to the example set by George Devey in his houses and to the new democratic spirit.

The planning of these detached and semi-detached houses built in towns had its effect in large terrace houses and also in smaller type. Just as the plan of the eighteenth century house became standardised in its principal elements, so the small suburban house of the latter half of the nineteenth century, the Victoria bay-windowed house, became standardised with little variation up to the Great War. At this time the front garden was introduced to the town house and served the same purpose as the basement area in the earlier plan, providing a space between the public footpath and the rooms in the front of the house.

The suburbs of the majority of our larger industrial towns are developed with long roads of houses of this pattern and the coarse detailing with which they are covered is to some extent retrieved by their continuity of treatment.

Bedford Park and Garden Cities

In 1880 Norman Shaw designed the Bedford Park estate mainly in an open rural formation containing detached, semi-detached and terraced houses of a Dutch character, many with elaborate gables. The gabled bay-window house became popular and this feature added another discordant feature to the terrace house in which it was often incorporated.

In 1898, with the publication of Howard's *To-morrow*, came the *coup de grâce* of the terrace house, for it was the movement of which this was the origin which gave the romantic villa a social and political importance which led finally to the repression of the tradition of English civic design already severely damaged by the products of the Industrial Revolution. Howard in his book condemned the insanitary overcrowded slums of the industrial districts and advocated the creation of semi-rural towns where the advantages of the country and town could be "married." The book aroused considerable public interest and the enthusiasm of social reformers, who were inclined to class all forms of terrace houses together and condemn them on the criticisms applicable only to the property created in the industrial towns during the same century, criticisms which did not apply to the traditional terrace house. Ruskin, also, attacked the terrace house from the æsthetic standpoint, and although from the social side the terraces of Bath, etc., were probably overlooked or condemned unconsciously, Ruskin's criticisms included these.

CRITICAL COMMENTS ON VARIOUS TYPES OF TERRACE FACADES

THE PALACE TYPE

The palace façade as applied in a square will be considered separately, as it can be argued that this should not only be articulated and punctuated in its length, but also by some method of inflection related to the centre where there may be a monument, a formal garden or the intriguing interest of informal shrubbery and lawns, below fine trees. In a street, however, the sense of longitudinal direction and rhythmic punctuation are the essential qualities. The palace façade consists usually of a central feature, such as a portico, and flanking blocks at each end. When prominently designed, this portico does suggest an entrance on an important planning axis and implies not one of several individual houses but a royal palace or a public building. When applied to a square it becomes a theatrical backcloth and the fact that there are separate houses in the block is not expressed. The actors on such a stage at the time when these buildings were erected had a fine living tradition of grace and dignity which required an adequate setting, and the palace façade probably was employed as a matter of course, being a well-known idiom connected with the Renaissance, and at the time all the aristocracy was enthusiastically patronising the new style from Italy and France.

One of the earliest examples is the east side of Queen's Square, Bath, where the major criticism is that the pediment is too heavy ; but the detailing is very good, and the doors are well subordinated and emphasise the fact that the ground floor storey is purely a base for the columns and pilasters over.

Two further squares occupied by stone terrace houses and both built by the Adam brothers, namely Fitzroy Square and Charlotte Square, are alike in the composition of their masses. Both are finely detailed, and yet the former is rather more severe and hard in character, and one can imagine it being more appropriate in Edinburgh than Charlotte Square. Portland Square, Bristol, has a well-designed ground floor storey containing finely designed entrances, but the upper storeys are somewhat uninspired and lacking in character.

Of the palace type built in brick with stone or stucco insertions, there are numbe ; all over the country, and among the more successful are Bedford Square, Tavistock and Gordon Squares, London, and Brunswick Square, Bristol.

Here in the Bloomsbury work, where brick is the main structural material, the window openings with their reveals stuccoed and painted appear purely as piercings in the structure, and the flat pilasters are so obviously applied to the surface of the wall that one is less inclined to think of them as having a structural significance resulting from different planning of rooms behind, and the criticism applied to Queen's Square becomes less

convincing ; but the original idiom, however, is still recognised.

The proportions of the whole and individual openings in the façade to Bedford Square are excellent and the positions of doorways have been carefully considered in the composition. The termination of the façade is marked by a small break forward, and it is further emphasised by the open stucco balustrated parapet wall. The importance of the first floor rooms is well signified by the more dignified shape of window employed. The string course below the first floor also provides a link between what would otherwise form a restless series of openings in the ground floor storey.

The insertion of the completely stuccoed panel in the centre of the composition is at first difficult to accept, but the strong rhythm of the windows continues through the feature and maintains the sense that there is still a single structure behind, and this is further suggested by the stucco skin which covers another bay of windows on each side of the pediment, so that the whole feature appears as a veneer over the brick structure.

The west side of Tavistock Square depends still more on the stucco enrichments for its architectural interest. The intermediate groups of pilasters appear to be rather casually applied and the continuity of the façade depends more upon the stuccoed ground floor storey and continuous first floor balcony. The south side is particularly well composed and the stuccoed ground floor storey raised high above the pavement produces very good scale and dignity to the façade. The first-floor rooms are here emphasised by the balconies extending across the three windows in each house.

In Eaton Square, between Lydall Street and Lowndes Street, is a terrace of the palace type, having flanking porticos with detached columns set along from the extreme corners and a central feature formed of a longer portico of six detached columns. They are set on a colonnaded ground floor storey of Doric columns, the space over forming a balcony to the first floor rooms.

The terraces of Belgrave Square have end projections with three-quarter engaged columns and a central feature of greater length, all linked together by a finely detailed entablature. The ground floor windows are circular headed and the entrances consist of projecting porches. The work in both Squares is faced completely in stucco and achieves a similar scenic effect to the work of Nash. The porticos in Eaton Square Terrace, however, are much too suggestive of a change in planning to justify their use in a terrace block. In the Belgrave Square examples, however, the horizontal line is not broken by the columned features which are so well restrained in their form that there is little change of planning suggested.

In the street the palace type frequently occurs, and if the street continues with many side turnings, the pedimented central feature does appear more difficult to justify, although in most cases the feature is

Landsdowne Place, Victoria Square, Clifton (mid 19th century)

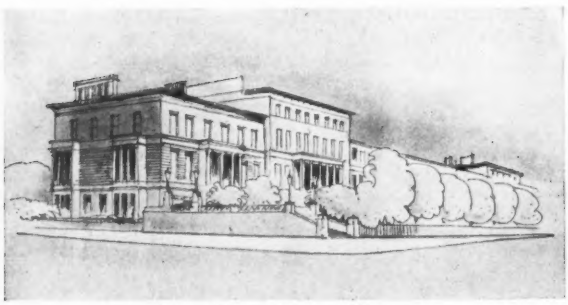
kept very flat against the wall face with only a $4\frac{1}{2}$ in. break forward, and might be claimed as pure piece of decorative treatment to a long unrelieved façade.

The best street of this type, and probably one of the finest streets in England, is Pulteney Street at Bath. Built of local stone by Baldwin, the terraces exhibit the pediment, not as a central feature but at the ends and in intermediate positions along the façades. Shallow pilasters rather widely spaced together with the pediments and certain windows which are emphasised serve to punctuate and give scale to the façade.

Portland Place, London, is about the same width as Pulteney Street, but not so long. In the former each block is treated as a true palace façade, but the central pediment tends to detract from the sense of continuity so well emphasised and finally stopped in the latter in the Holbourne Museum. In detail, however, the inevitably fine and accomplished handling by the Adams makes the individual blocks of Portland Place of more interest than those of Pulteney Street.

Both Carlton House and the Adelphi Terrace belong to this type, but neither is situated in a square, facing St. James's Park and the Thames respectively. The Adelphi, constructed on a massive base, when seen from the river, did appear as an individual building requiring some form of articulation, and the stuccoed pilasters and pediments, applied almost in the manner of lace to a costume, proved adequate.

Carlton House Terrace, facing the Park, is much longer, and the Doric colonnade supplies the essential rhythm required in the base, but the use of this order with only a balustrade above is open to question. The main façade beyond is excellent, and it is important to remember in acknowledging the unity and grand impression created by the façade that the entrances to the houses are on the other side, and that this terrace is one of the few which is considered and designed on all its façades. The presence of the unrelated central



Great Western Terrace, Glasgow

pediment behind the main Corinthian colonnade is an obvious criticism which does not require further emphasis.

The terraces designed by Nash in Regent's Park come in the same category, and the mention already made of the scenic quality of his work can be repeated now. Seen across the Park, the Cumberland Terrace does indeed to all appearances become a palace.

In York Terrace Nash has used the rear entrance to the houses and thus freed the principal façade of embarrassing offices, but the rear of most of these terraces received little attention in their design.

THE CRESCENT AND CIRCUS

Of the two forms the first has been more frequently used and the best examples are to be found at Bath, not in the centre of the city, but on the higher slopes of the surrounding hills, commanding fine views over the buildings below. The closed form of the Circus does not lend itself so readily to isolated display, but in a built-up area it is an excellent alternative to the Square, as seen in the layout of Edinburgh. The Circus at Bath and the Bedford Circus at Exeter are both laid out on comparatively level sites.

The Circus at Bath is built in the Palladian style and excellently detailed. The junction with the three radiating roads is good, and it is worthy studying the way in which the treatment of the curved building face is cut short on the corners, and the cornices alone allowed to run round, fully signifying that the façade of coupled columns applies only to the circus, and the return façades with their simpler treatment are conforming to the severer treatment of their respective streets.

The orders are employed in their correct position up the face of the façade, but it is a pity that the ground storey is not designed more obviously as a base for the upper portion. As designed, one is inclined to search for such a base in the basement areas, missing a feature which is so characteristic of the other terraces in the city. The unit of a single house, however, is skilfully used, and although divided equally into three horizontal divisions, each with columns, it is interesting to note that the first floor windows still express the social importance of this floor.

Bedford Circus, Exeter, built of brick in 1790, consists of three-storeyed houses, and has in the treatment of its façade a similarity to Leverton's work. The continuity is well emphasised by the stone string courses at first and second floor levels, and the cornice above, also by the sharply differing window proportions. The unity of each house is well defined by the grouping of the windows and the prominent entrance doorways.

Of the crescents, the most outstanding and accomplished both in original conception and detail is the Royal Crescent at Bath. Situated on rising ground, it commands good vistas across the city. Although in its setting it appears to be out of the city proper, when approached from Buck Street the impression is that of continuity amounting to a climax, a result of the same town planning tradition which created the squares in the closely built-up areas of London. It is true of all the Bath crescents that they are situated on the foot of the hills surrounding the city ; approached off the main roads out of the town, they have a certain semblance to large country houses, and although composed of many identical houses there is present a certain spirit of wealthy independence, which was probably desired by the original occupants.

The crescent on plan consists of a wide parabolic curve stopped at either end by a larger house, the façade consisting of three-quarter detailed Ionic columns running through the first and second floors on a base occupying the ground floor. Two pairs of coupled columns denote the centre of the curve and the extremities are signified in a similar manner. The scale of the whole and the treatment of the ground floor openings achieve a definite domestic character, and the classical conception so emphatically expressed by upper storeys give the dwellings the highly cultured significance so essential to eighteenth-century society.

Camden Crescent, a small crescent having the same number of storeys, is treated in a similar manner to the crescent, but with flat pilasters and Corinthian capitals. A central feature consists of a pedimented portico of three-quarter detailed columns on a rusticated base. The individual doors are emphasised by pilasters and a hood, which are a little out of character with the main façade. It is interesting to note the way in which the cornice and string courses rise with the ground and the windows are raised in groups of three. The façade by its low relief seems to suffer from overcrowding of pilasters and openings, a fault which is overcome in the Crescent by the deep relief of the three-quarter detached columns.

Lansdowne Crescent has only a pilastered and pedimented central feature, the remaining façade being divided by string courses and the ground floor storey rusticated. The spacing of the pilasters to the central feature is weak as a result of the fenestration in the centre, and rather laborious expedients have been employed to reduce the duality present here. The end of the crescent is interestingly and effectively punctuated on the falling ground by the larger corner house with the curved bay.

The Royal York Terrace at Clifton is a good example of a genuine row of terrace houses. The houses and broad promenade are raised well above the service road and the space under devoted to stores and an independent access to the basement direct off the road. The rough stone base also contains several flights of steps which, with the sturdy informal character of the openings, provide an admirable foil to the formal stuccoed façade above and form a link with the gardens below. The great length and uninterrupted repetition of the same unit is relieved of monotony by the wide promenade and the interesting base and planting already mentioned. Here, as in the Bath terraces, a grand vista is obtained from the terrace.

A crescent of more intimate scale is the Paragon at Clifton, and its more restrained site and outlook has a proper response in the reticent treatment of the façade. The entrance lobbies, semicircular on plan, are unusual in form but particularly suited to this group of town houses. The curved plan, however, is poorly executed in the main wall face and results in a crude parapet line.

Park Crescent, by Nash, is beautifully conceived in scale, and belonging to the later period of freer classical interpretation, the Ionic colonnade at ground floor level provides an admirable emphasis to the curved form of the plan. A similar feature was employed on a larger scale by Nash on the Quadrant in Regent's Street.

Pelham Crescent was obviously designed to allow its occupants to enjoy the interest of the passing crowds on the promenade in the foreground and the broader vistas of the sea beyond. The first floor crenoline balconies are combined with the second floor windows, retaining in their treatment the traditional precedent of the first floor rooms. The unit is beautifully conceived, hanging as a basket from the wall face, yet by its repetition an inherent part of the design. The composition of the façade unit is finally completed by the top storey windows echoing the circular form below. The church forming the central feature is so orthodox in its composition that it comes rather as an anticlimax, and although its ecclesiastical nature certainly requires to be easily recognised, it might have been better linked to the walls of the domestic buildings on either side.

STREETS

In streets the success of the terrace is related to the general cross-section of the street, but as the height of buildings and distance between them have both been largely determined by legislative measures the following comments will be concerned rather with the form of the unit house employed.

By far the most common unit is that of the simple bay, three storeys high, divided up by three windows in width, and it is worthy of note that this bay has been employed for nearly two centuries with little variation except in change of detailing and number of window openings required by the size of the house.

Smaller houses form units of two or even one window in width, but in the latter type the entrance is usually placed at the side.

It is significant that the great majority of terraces have a parapet wall carried up to screen the roof behind. Earlier examples, such as in Cheyne Row, Chelsea, show the eaves and roof, and are rather an anachronism from mediaeval times, for in the eighteenth century the parapet wall becomes common practice as a result of requirements already described. Later, at the end of the century, the parapet wall was often replaced by an open balustrade.

The Dutch influence and that of Wren in the seventeenth century produced the first façades having the formal expression to-day associated with civic building, but in these early façades with the windows on the wall face and of rather heavy character, the spacing of openings was regular throughout the length of the block and the individual house was not expressed except by the entrance. The continuity of treatment was emphasised by the brick and stone string courses used, such as in Bedford Row.

The terrace of houses in Orchard Street, Bristol, are of particular interest, as they have both horizontal moulded string courses and the definite grouping of windows in each house. Furthermore, the individual house is emphasised by the stone quoins marking the position of the party wall, a characteristic feature of Bristol terraces. The expression of the individual house as a unit is a step forward in the design of the terrace, and during the 18th century, when brick façades received considerable refinement in their design, grouping of windows frequently occurs.

The façades of the houses in Bedford Square, apart from the central feature, are in all other respects equally applicable to the street, and show the grouping of windows, and it is also worth studying the subtle variation in the window spacing of the end houses, where it is increased to produce a sense of strength and termination.

The houses in Southernhay, Exeter, exhibit the same grouping. Here, in the Bedford Square houses and many other cases, the string courses are reduced

to one at first floor level which serves together with the cornice to link the houses and also to allow freer treatment to the entrance doors below.

Balconies to each first floor window, or linking groups of windows, or as in the Marine Esplanade at Dover, running along the whole façade, contribute to the continuity of the units.

In Bedford Way and Montague Street, where there is an extra storey, the continuity is achieved more emphatically than usual, the ground floor storey being stuccoed and rusticated with horizontal joints and a string course replacing the cornice at third floor level. The balconies here grouping the three windows of each unit are so close that they also appear continuous when seen in perspective. The entrances are well subordinated and consist of deeply recessed semi-circular headed openings.

The pleasant terrace by the Adams in Mansfield Street also shows a grouping of windows, the position of the third window being occupied by the entrance. In some contemporary examples, however, such as Huntley Street and Woburn Place, Bloomsbury, there are in the ground floor the same number of windows as above, together with the entrance, which reduced the width of the windows and tends to reduce the scale at this level.

A very pleasant terrace of small two-storeyed houses in Whichcote Street, Lambeth, has a fine brick quality ; here the first floor windows are grouped, and yet the lower windows and door, although not directly underneath, do not produce a weakening effect as is the case of a three-storeyed façade. The first floor windows have particularly pleasant cast-iron balconies, which by their great depth and small projection, appear rather as decorative grilles to the windows. The stone coping is emphasised beneath by an interesting brick dentil treatment, which is characteristic of the locality and districts near New Cross. The de Crespigny Terrace and Denmark Hill both employ the alternative of omitting a window from the ground floor storey, and in the shadow created by a continuous balcony at first floor the door and remaining window are placed without any relationship to the solid panels and openings over. The upper windows are pleasantly grouped, the taller first-floor window being further dignified by being placed in a semi-circular headed panel. It is unfortunate that such a fine unit should be built upon such a weak ground-floor storey. The balcony, although constituting a horizontal division, is so light a form that it does not, in fact, appear to relieve the circular-headed openings below of the weight of superimposed brickwork.

The doorways, such as those in the terraces in Mansfield Street or Bloomsbury, are recessed from the main wall face, a factor which contributes greatly to the formality and dominating continuity so characteristic of the brickwork of this period.

The units at this time were planned side by side, so that no doorways were adjacent and each unit by its repetition became an effective element in the rhythm of the façade. Exceptions occur as in Mansfield Street, Portland Place, and the centre pair of houses in the Bedford Square façades, where the doorways are adjacent. In the early nineteenth century units were reversed to bring the doorways in pairs, possibly on the grounds of economy in the construction of the combined chimney stack and back-to-back fireplaces. Such an arrangement tends to reduce the significance of each house as an element of design and to create a larger unit of two houses. An early example occurs in Upper North Street, Brighton, which, if the disparity in scale of the two groups of pilasters is ignored, does provide an interesting design, although it is rather coarsely detailed. Another terrace in the same street, also cement rendered and having Ionic pilasters, planned in the early manner of separate units, is particularly well proportioned and detailed. A first floor balcony runs the whole length of the terrace and turns the corner to a particularly well-designed end elevation.

Most of the houses built with adjacent doors contained bay windows. No doubt if the early arrangement were adhered to, a long street would prove monotonous, so that the larger unit was possibly the right solution, as the majority of the new streets in the suburbs were of considerable length.

Unfortunately the design of the façades of such houses was now rapidly deteriorating, the vast majority of this bay-windowed type being particularly coarsely detailed, and they have since done much to damage the prestige of the terrace house. Such an example is Seafield Road, Hove, which, built a little later than Osborne Villas, an adjoining street, has none of the simplicity and refinement of the latter.

Another example, probably earlier, in Gloucester Street, Bristol, shows the bay applied only to the ground floor rooms. Here, as in the examples which shortly sprang up in all the suburbs—particularly in London, the quality of brickwork is not valued for itself, the house depending rather on the cream-painted cast concrete, and stone pillars forming the bay windows and entrances.

The bay windows to such houses are inclined to possess an aggressive feeling, and when of the two-storeyed type do not indicate the different use of the sitting-room below and the first bedroom over, as the windows are invariably identical in size and proportion.

Such a type of house is probably the most standardised ever erected in England. In design, however, they compare poorly with the fine but unpretentious houses of the previous century, such as those seen near Albany Street, in London.

The gable which became popular over the bay window broke up more seriously the skyline, already disturbed

by the return to the pitched roof shorn of a protective parapet wall.

Mention should be made here of the double-fronted bay-windowed house, which, although originally introduced as a detached houses, was also built in terrace formation.

Two terraces of better design, both having only one window in width, Canyne Square, Clifton, and Munster Square, Regent's Park, have their principal rooms well emphasised by larger windows and finely detailed balconies at first floor level, the entrances being placed at the side and rather subordinated to the tier of windows.

Larger three- and four-storeyed houses built in terraces were of a similar character, and the criticisms of the two living-roomed type apply to these also, although there were relatively fewer erected. An indication of the difficulty of planning a large house on a narrow frontage in terrace formation can be seen in a terrace designed by Ernest George in the Dutch style in Harrington Gardens, Chelsea. Here it was necessary to provide a light bay in the main façade, but the continuity of the main building face is fairly successfully maintained by the arcaded brick screen linking the main blocks.

The nineteenth-century bay windowed terrace house stands midway between the finely urbanised eighteenth-century brick house and the present-day blocks of four to twelve houses of bastard rural character which occur in the municipal housing estates and the semi-ruralised bay-windowed houses of the speculative estates, neither of which possess a true urban spirit.

Unfortunately on the municipal and private estates it is often impossible for the houses erected to have any civic quality on account of the road layouts, the derivation of which is very obscure, but which are certainly not inspired by any town planners of traditional repute, nor by the layout of our own villages.

It has already been pointed out that the Ministry of Health does not encourage the erection of blocks of more than twelve houses, and yet many blocks built in close proximity have hipped roofs and thus reduce still further the appearance of continuity.

In such circumstances it is difficult to comment on their façades, and the pre-war bay-windowed type is here recognised as the last form of terrace houses. The front gardens to these pre-war terraces, sometimes almost standardised in the planting of privet hedges and lime trees, was perhaps a gesture to the growing preference for the openly developed estate. More often than not the presence of front gardens has an effect of breaking the unity of the street by the eventual uneven growth of shrubs and trees.

A group of four houses constructed of reinforced concrete in 1934 by Tecton is one of the few contemporary attempts to establish a unit of urban character. The rhythm created in the design of the two lower storeys is marred by the rather crude treatment of the balconies on the floor over.

An important aspect of the street terrace not yet considered is the treatment of the ends of the block where abutting another street probably running at right angles. To plan the entrance of the end houses on the side wall provides a good method of raising the status of the elevation and the importance of the cross road, and can give a stronger appearance to the end of the main façade. An excellent example occurs on the end blocks of Tavistock and Gordon Square in Gordon Place, where the blank walls over the entrances are filled with brick panels having similar stucco architraves to the main windows, and the two blocks are linked by a screen wall with a decorative niche at the centre.

A common eighteenth-century method of treating the end wall was to fill it with panels of the same proportions and at the same levels as the windows on the main façade, as in Torrington Square.

The end of the terrace forming the south side of Tavistock Square is successfully designed by continuing the stucco base and main cornice round and repeating the Ionic pilasters on the corners. Unfortunately the entrance is placed on the end of the main façade, which makes the corner appear weak.

Chester Square is also treated in a similar way to Gordon Place, except that an archway leading into the mews forms the central feature on the screen wall. The normal two-window unit employed on the main façade is reduced on the end house to a wide single-window unit.

Terraces of smaller houses, built as they were more for utility and economy, received even less attention in the design of the side elevation than the main façade. This is true of the smaller house of the formal brick façades such as in Whittlesey Street and de Crespigny Terrace, Denmark Hill; the former a case of a regularly fenestrated façade which contained the doorway of the last house on the corner, and the latter an irregularly fenestrated ground floor in which the doorway is also placed at the extreme end. Both examples appear structurally weak on the corners, yet such difficulties can be overcome, as in the façades of Bedford Square where the two centre houses of the terrace are planned with adjoining doorways.

The corner of Albany Street and Robert Street shows an interesting treatment of the corner in a formal façade, where the wall faces have a 4½ in. break and are connected by turning the corner with a quarter circle.

In the Victorian bay-windowed type the units are generally arranged so that a bay window occurs at

the end of a terrace and serves as a fairly satisfactory punctuation. These terraces are usually found on large estates having many long roads, crossed by short intercommunicating roads not containing houses. It might be argued that the use of such roads does not require any more expression than is contained in the blank end walls and the high screen walls to the gardens, an expression which serves to emphasise by contrast the importance of the roads in which the houses are situated.

As a general rule the pitched roof is employed and in the majority of terraces where the parapet wall serves as a screen the roof has little bearing on the façade. In such instances the ridge may be parallel or at right-angles to the front wall, and in houses having a great depth the height of the ridge may be kept to reasonable limits by an internal valley gutter in the former case, or in the case of the latter by forming a hipped end behind the parapet wall. The alternative is a higher parapet wall which may appear rather heavy, or its apparent weight may be lightened by the introduction of panels, as in Whittlesey Street, Southwark, where the roof has only one pitch falling to the rear, and thus becomes rather high in the front. This terrace also has an unusual grouping of the ground floor openings where the doorway is placed between two windows and thus makes the two rooms rather small.

When the ridge runs into the front wall the gable is very rarely expressed, but two examples, Roupell Street, Lambeth, and Brockham Street, Southwark, have the parapet wall replaced by a gable end. The strong silhouette formed suggests that the unit of each house occurs within the width of the gable, but, in fact, it extends from apex to apex and the window openings, although correctly expressing the position of the rooms, tend to contradict the gable outline.

The back elevation to the terrace house, when facing the private garden, has in the earlier work received little architectural expression. The formal façade to the street is invariably replaced on the rear by a purely utilitarian assembly of projections and openings, often the result of the addition of sanitary closets and whimsical bay windows, which when the houses are considered in a group, provide a motley assembly of shapes.

The eighteenth-century house in a terrace rarely has a garden of any consequence and the activities of the occupants when out of doors were conducted in the public gardens and, in the case of those living in a square, in the gardens in front. It was not until the nineteenth century, when the rural workers came to live in the town, that the back garden became much used, and even then the rear elevation received little more consideration than before.

PRACTICAL CONSIDERATIONS

It is not intended here to deal fully with the practical advantages of the subject, but there are certain factors which have been common to terrace houses at all times.

The most obvious gain is in the economy of outside walling and the joint use of the party walls. The question of insulation to-day is an important but by no means an unsurmountable problem. A factor which is a more readily recognised advantage in our present methods of production, but which was also present in the earliest examples, is the standardisation of windows, walling and other elements of the structure both in façade and plan. To-day can be added the advantages of standardised pre-fabricated units to effect economy in costs. Compared with forms of open development an effective saving in the cost of introducing power services, water and drainage can be made. In densely populated areas terrace formation can give a density of from 30 to 40 houses to an acre which, although not comparable with that achieved in the same districts by flats, does in individual accommodation provide better facilities for living in privacy and with a greater feeling of space achieved by the back gardens. It is unfortunate that in these districts a clearance scheme often includes for demolition terraces of very pleasant design with fairly good accommodation, which if renovated and repainted would have a new life and add gaiety to what were previously dismally coloured streets.

Generally, however, the outskirts of the towns provide the best fields for development from the point of view of land costs. Here, where the maximum density is usually twelve houses to the acre (under the Town and Country Planning Act, 1937) it would be possible in laying out large areas to group the terraces in such a manner as to leave larger open spaces, which, if well planted, could by the sharp contrast created form an excellent foil to the façades ; a contrast is not fully effective in normal open development, which merely produces a rather monotonous neutrality.

The important provision of access and in many estates to-day of garage accommodation can be achieved on the ground floor across a wider frontage now occupied by garages and side entrances. An alternative now seen on some of the estates for garage accommodation is to provide narrow roads at the back of the gardens and is rather reminiscent of the mews in the town squares.

If the ground floor were opened up, it might be possible to re-establish some of the principal living rooms on the first floor and provide the opportunity for a more expressive façade. The longer frontage would allow a narrower cross section and might provide cross ventilation to the larger rooms.

The points outlined above are merely suggestions of the direction which might be taken in terrace houses if built for use to-day.

CONCLUSION

It appears that in relation to the population the majority of terraces were erected during a period from 1750 to about 1830 and a second period from about 1850 up to the Great War.

The work of the first period is inspired by the principles of classical culture, a culture evolved in the Greek cities and having as its objective the creation of a suitable environment in which individuals could live together in a beautiful manner. In its evolution and expansion to Rome and the Latin countries and finally to England this objective has still persisted. Adapted to the different geographical, climatic and social requirements, it is the same culture which we find gradually evolving its appropriate expression in England during the seventeenth century to culminate in the fine civic building, country and urban houses of the first period mentioned.

The vast numbers of terraces of houses built in the second period are of a different spirit, and are built for a people who, as a class, were not attracted to the town by the culture and society to be found there, but by force of economic circumstances. The landlords and builders responsible for this development were concerned only with the monetary gain to be extracted from such a ready market, and the people constituting the market had no cultural standard or background, and required little more of a house than that it should provide them with protection and accommodation. It is not unnatural then, that the builder concerned himself solely with satisfying the needs of his market just as the eighteenth-century builder satisfied his client who required more than merely protection and accommodation.

During the first period when the terrace house was most popular, and incidentally when the arts as a whole were at their highest level in England, there were definite accepted standards of taste and rules of æsthetics evolved, and there was then also a close relationship of the governing community and those responsible for the establishment of these standards, and both these categories of social life were represented by a single oligarchical aristocracy of the period. Surely it is no coincidence that similar conditions existed in the Greek States and the Italian States of the Renaissance?

The late nineteenth century showed a community which was governed by a class uncontrolled by any cultural standards; indeed, the cultured, despised by society, were driven into a separate class. The general deterioration of culture can be seen only too clearly in the variety of architectural styles practised and the rather superficial values attached to this particular art by individual preferences of style made from time to time by various high officials of the Government. If the condition of society is not one of genuine co-operation, it is not unnatural that there should be no general standard of taste and a lack of a consistent civic expression in buildings.

When the situation of to-day is considered, it appears that the same condition is still maintained. It may be said that there is to-day a considerable degree of co-operation and organisation in our essential services, but are we, as a result of this, living in a closer harmony than in previous times? The basis of our suburban estates is one of numbers of self-centred family units interested only in their own lives and often having little association even with their immediate neighbours, and, as such, appears to be the complete antithesis of civic living.

If, then, the post-war domestic architecture is generally speaking lacking in the architectural graces and social cohesion that characterised certain previous ages when architectural reasons and traditions predominated in architectural conception, the profession should examine its own attitude and activity in relation to housing and, if necessary, revise its policy towards this problem and towards the community of which it is a part and which it should serve.

Although it is not the purpose of this thesis to determine the disrupting element in our society, it is pointed out that until we do consciously work for the mutual benefit of our neighbours, we cannot hope to secure a culture which is an essential element of this society and consider ourselves civilised in the real meaning of the word.

Thus, it seems that the time has yet to come when our contemporary urban expression can compare with that earlier period in our history when men sought with some success to acquire the grace and dignity which is a part of the reality of life.

THE RISE AND DECLINE OF THE TERRACE HOUSE IN ENGLAND

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REVISION OF THE FORM OF CONTRACT

The revision of the 1931 Form of Contract has now been completed by the Contracts Tribunal in consultation with Mr. H. I. P. Hallett, K.C. (now Mr. Justice Hallett) and the revised draft has been approved by the Practice Committee, Executive Committee and Council of the R.I.B.A. and by the Contracts Committee and Council of the National Federation of Building Trades Employers.

The revised form, which will be known as the R.I.B.A. 1939 Standard Form of Contract, will be published on 1 July, on which date the existing form will be withdrawn from circulation.

The following notes have been prepared by Mr. Geoffrey C. Wilson, Chairman of the Practice Committee and a member of the Contracts Tribunal, in collaboration with Mr. Charles Woodward, whose assistance to the Tribunal, particularly in the work of instructing and conferring with Counsel, has been of the utmost value :—

It should be noted at the outset that no alterations have been made in the revised form which affect the underlying principles and agreements reflected in the 1931 Form. Such alterations as have been made are restricted to the removal of those ambiguities to which attention has been drawn during the last seven or eight years and to the adjustment of the Conditions of Contract to agree with modern practice in the industry. Moreover, the respective liabilities under the Contract of the Employer, Architect and the Contractor in relation to each other are the same as those imposed by the 1931 Form.

WHERE QUANTITIES ARE PART OF THE CONTRACT

ARTICLES OF AGREEMENT. The specification is not referred to because it is not to be one of the contract documents.

In the following clauses only the drafting has been revised :—3, 4, 5, 6, 7, 8, 11, 12, 13, 16, 17, 18, 19 and 23.

CLAUSE 1 (*Scope of Contract*), contains some revisions in drafting, with the present Clauses 3 (Contractor to provide everything necessary) and 21 (Failure by Contractor to comply with Architect's instructions) incorporated.

CLAUSE 2 (*Drawings and Bills of Quantities, etc.*) The Architect must provide the Contractor with two copies of a Specification which is not to be a Contract document.

CLAUSE 9 (*Ascertainment of prices for variations*). Slight revisions in the wording have been made and the provision for interim valuation has been transferred to Clause 24(*a*) (Certificates and payments). This clause is the present Clause 10 (Prices for extras, etc., Ascertainment of).

CLAUSE 10 (*Bills of Quantities*).This clause, as amended, makes it clear that clauses inserted in Bills of Quantities are not to override the printed conditions. The function of the Bills is only to define the quality and quantity of the work included in the contract sum. This clause is the present Clause 11 (Bills of Quantities).

CLAUSE 14 (*b*) (*Injury to persons and property*). A provision for insurance for injury to property must be inserted in the Bills of Quantities and by sub-clause (*c*) if the Contractor has not so insured the Employer may insure and deduct the premiums from money due to the Contractor. This clause is the present Clause 16 (Damage to persons and property).

CLAUSE 15 (A) (*Insurance*). The extension of time has been transferred to Clause 18 (Delay and extension of time). (B). If the Employer has not insured the

Contractor may insure and add the premiums to the contract sum. This is the present Clause 17 (Insurance.)

CLAUSE 20 (*Determination by Contractor*). This clause now includes provision for a company going into liquidation, as also does Clause 19 (Determination by Employer) if the Employer is a company. This clause is the present Clause 23 (Determination of contract by Contractor).

CLAUSE 21 (*Nominated Sub-Contractors*). This clause has been redrafted and the adjustment of the sums will be found in Clause 24 (*e*) (Certificates and payments). The present Clause 24 (*d*) (Prime cost—Provisional sums and artists) has been transferred to this clause in sub-clause (*f*).

CLAUSE 22. (*Nominated Suppliers*). This clause has been redrafted and the adjustment of the sums has been transferred to Clause 24 (*e*) (Certificates and payments). This clause is the present Clause 24 (*a*) (Prime cost—Provisional sums and artists).

CLAUSE 24 (*Certificates and payments*). The revisions to this clause are mostly of a drafting character. Interim valuations are now provided for here as are also the adjustment of sums under Clauses 21 (Nominated sub-contractors) and 22 (Nominated suppliers). This clause is the present Clause 25 (Certificates and payments).

CLAUSE 25. (*Provisions in the event of war*). This is a new clause.

CLAUSE 26 (*Arbitration*). There is now no alternative arbitration clause and this clause provides for referring every dispute to arbitration. The clause has been extended so as to remove any doubt as to whether some matters could be referred.

WHERE QUANTITIES DO NOT FORM PART OF THE CONTRACT

In the following clauses only the drafting has been revised :—3, 4, 5, 6, 7, 8, 11, 12, 13, 16, 17, 18, 19 and 23.

CLAUSE 1 (*Scope of Contract*) contains some revisions in drafting, with the present Clauses 3 (Contractor to provide everything necessary) and 21 (Failure by contractor to comply with Architect's instructions) incorporated.

CLAUSE 2 (*Drawings and Specification, etc.*). The Contractor must provide a schedule of rates upon which his estimate is based. The Architect is not interested in builders' quantities and only wants the prices for different classes of work in order to adjust variations. Measurements are then taken from the drawings and compared with the executed work.

CLAUSE 9 (*Ascertainment of prices for variations*). Slight revisions in the wording have been made and the provision for interim valuation has been transferred to Clause 24 (*a*) (Certificates and payments). This clause is the present Clause 10 (Prices for extras, etc., Ascertainment of).

CLAUSE 10 (*Quantities*). This clause as amended makes it clear that Bills of Quantities are not part of the Contract. The quantity and quality of the work in the contract sum is that shown on the drawings or described in the Specification.

CLAUSE 14 (*b*) (*Injury to persons and property*). A provision for insurance for injury to property must be inserted in the Specification and by sub-clause (*c*) if the Contractor has not so insured the Employer may insure and deduct the premiums from money due to the Contractor. This clause is the present Clause 16 (Damage to persons and property).

CLAUSE 15 (A) (*Insurance*). The extension of time has been transferred to Clause 18 (Delay and extension of time). (B) If the Employer has not insured the Contractor may insure and add the premiums to the contract sum. This is the present Clause 17 (Insurance).

CLAUSE 20 (*Determination by Contractor*). This clause now includes provision for a company going into liquidation as also does Clause 19 (Determination by Employer) if the Employer is a company. This clause is the present Clause 23 (Determination of contract by Contractor).

CLAUSE 21 (*Nominated Sub-Contractors*). This clause has been redrafted and the adjustment of the sums will be found in Clause 24 (*e*) (Certificates and payments). The present Clause 24 (*d*) (Prime cost—Provisional sums and artists) has been transferred to this clause in sub-clause (*f*).

CLAUSE 22 (*Nominated Suppliers*). This clause has been redrafted and the adjustment of the sums has been transferred to Clause 24 (*e*) (Certificates and payments). This clause is the present Clause 24 (*a*) (Prime cost—Provisional sums and artists).

CLAUSE 24 (*Certificates and payments*). The revisions to this clause are mostly of a drafting character. Interim valuations are now provided for here as are also the adjustment of the sums under Clauses 21 (Nominated sub-contractors) and 22 (Nominated suppliers). This clause is the present Clause 25 (Certificates and payments).

CLAUSE 25 (*Provisions in the event of war*). This is an entirely new clause.

CLAUSE 26 (*Arbitration*). There is now no alternative arbitration clause and this clause provides for referring every dispute to arbitration. The clause has been extended so as to remove any doubt as to whether some matters could be referred.

The memorandum issued for the guidance of members in dealing with the 1931 Form will be brought up to date and will, it is hoped, be of service to them when using the new form.

THE BRITISH PAVILION

NEW YORK WORLD'S FAIR

ARCHITECTS: STANLEY HALL & EASTON AND ROBERTSON [*FF.*]

LEFT: *The South Pavilion, and main entrance flanked by Hardiman's lions*

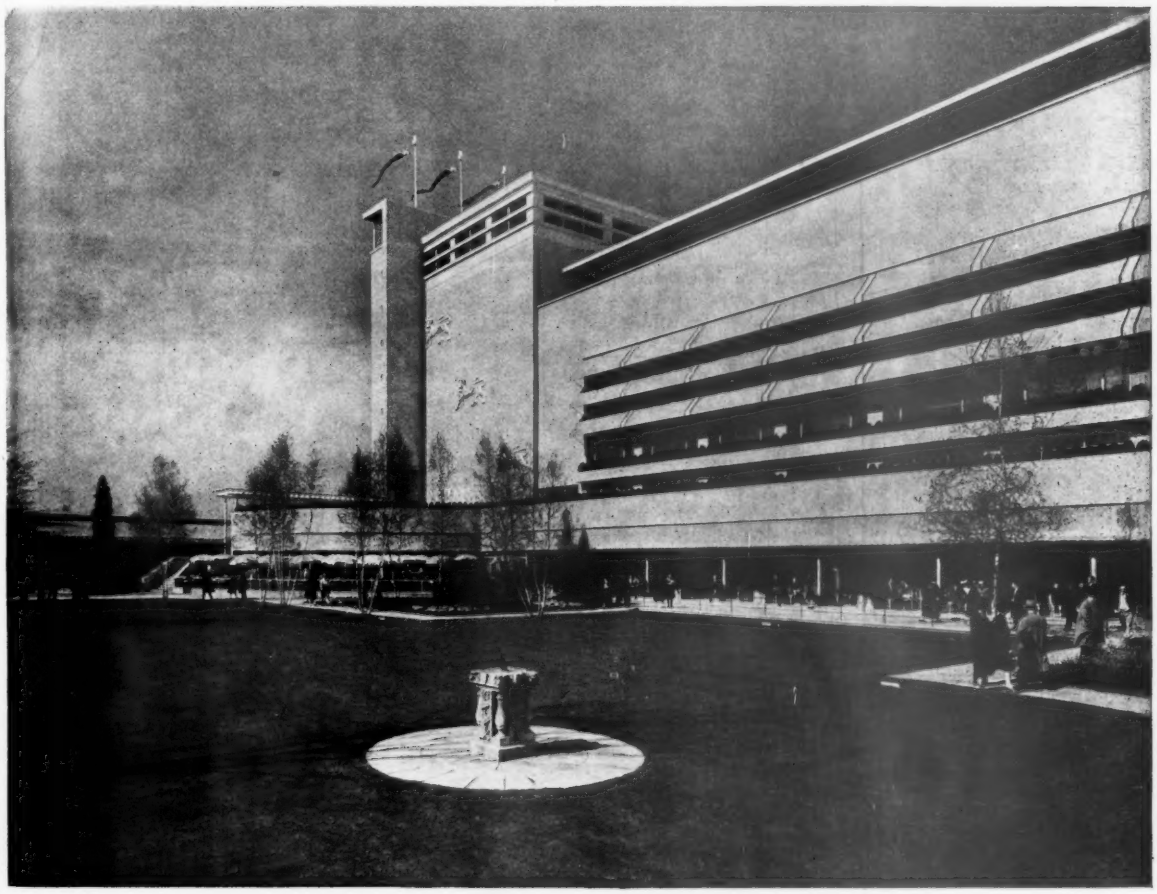
FACING PAGE: *The North Pavilion from the garden. The large windows with sun-blinds light the Maritime Hall. The curved wing behind the trees is the café, with a roof terrace over*

The British Pavilion at New York is the largest that has been erected by Great Britain in any international exhibition. Apart from the cinema, with its 230 seats, the area for actual exhibits amounts to nearly 95,000 super feet. The site is in a fine position, and is one of the few for foreign participants which makes possible an ample garden. It is situated in the section of the Fair which corresponds to the Civic Centre of a town—i.e., the park containing Government and Municipal buildings, in this case represented by the U.S. Federal group and the larger foreign pavilions.

In theory an exhibition building should be framed round the exhibits, allowing the finest setting and plenty of circulation space for the public; but in practice the actual exhibits inevitably remain uncertain until quite a late stage, and it becomes necessary to design from the start a framework of building which will be flexible and adaptable, and at the same time have dramatic qualities of its own.

The architects of this pavilion had previous experience of this necessity at Brussels and Johannesburg. They therefore adopted a theme of very simple structure, but dramatised it by taking advantage of the longest dimension of the site, giving the best possible vista through the length of the main building.

There are actually two pavilions, the North and the South, connected by a bridge. The main entrance is in the smaller South Pavilion, which faces the vast oval "Lagoon of Nations." Two 16-ft. wide external staircases, dominating the lagoon and flanked by Hardiman's gilded lions, lead up to a "Court of Honour" on the first floor. This is the vestibule to Britain's exhibit, 20,000 super feet in area, and contains the exhibition of gold and silver plate, an exhibit of the crown jewels in a curtain walled room, and a tableau of England depicted in Heraldry. All the exhibits in this "Court of Honour" are ranged round the walls, leaving the central floor space unobstructed for a width of nearly 80 feet. The floor is in deep green and cream rubber, designed like a lawn intersected with stone paving, and inset are two large Tudor roses. The ceiling is of burnished copper, adding by reflection to the height of the long curved hall. On the ground floor, beneath the Court of Honour, this pavilion is entirely given over to the exhibits of Australia, New Zealand and the Colonial Empire. These are entered independently of the main pavilion. The exterior of this North Pavilion was designed in its main lines by American architects to conform with the rest of the buildings of the American Federal group.



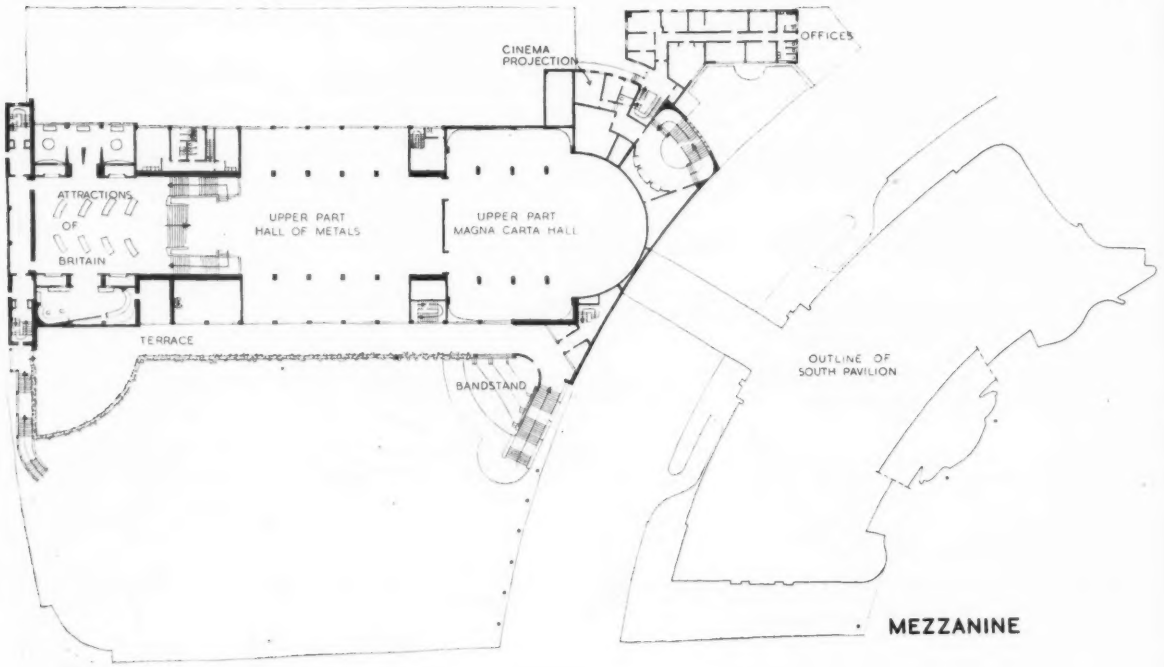
The bridge from this South Pavilion to the main North Pavilion is called " Westminster Bridge " ; its walls are lined with photo-murals of the Thames as seen from the actual bridge.

The main North Pavilion is planned on three descending levels, with the ceiling rising correspondingly with each drop in floor level. Thus the effect is of expanding height towards the far end, and the natural lighting from high clerestory windows enhances this effect. The vista culminates in the forty-five feet high gilded statue by Maurice Lambert, which is visible for a distance of over 300 feet within the building. This floodlit statue is the only note of gold in the interior ; walls and ceilings are all a very pale blue, and floorings blue and ivory.

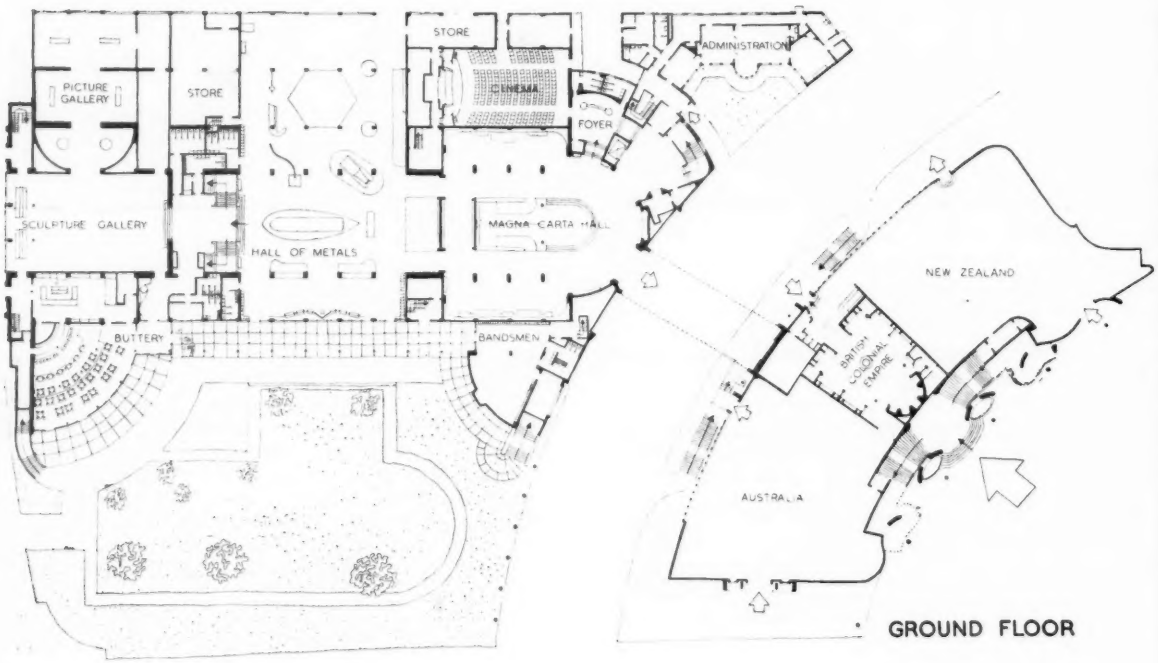
The first level comprises the Public Welfare section, dealing with the development of the town from Elizabethan times to the present day, modern village life and activities, and six wall displays entitled New Homes for Old, Mother and Child, Children at School, Britain at Work, Britain at Play, and Social Security.

The next level is the Maritime Hall, with its large central maritime map in copper and glass, representing the extent of British mercantile shipping, and a number of ship models ranged round the sides. This hall leads to the third and lowest level, the galleries displaying Irish linen, British leather and china, and fine woollens.

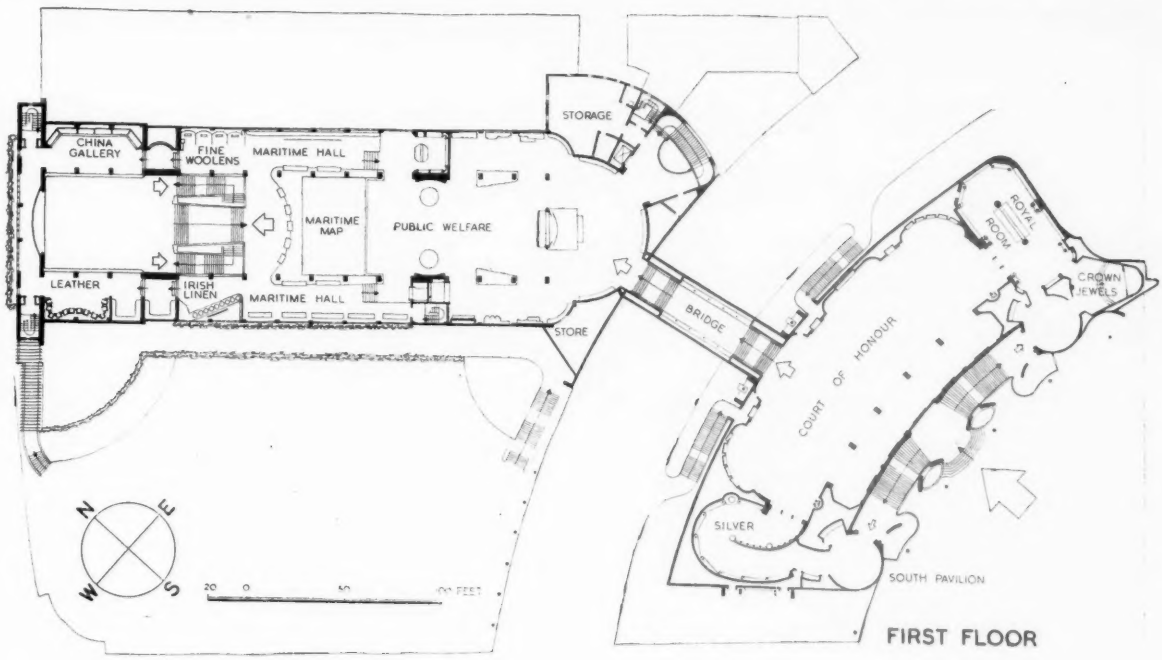
Leading down from the level of the Maritime Hall is a double staircase giving access to the ground floor



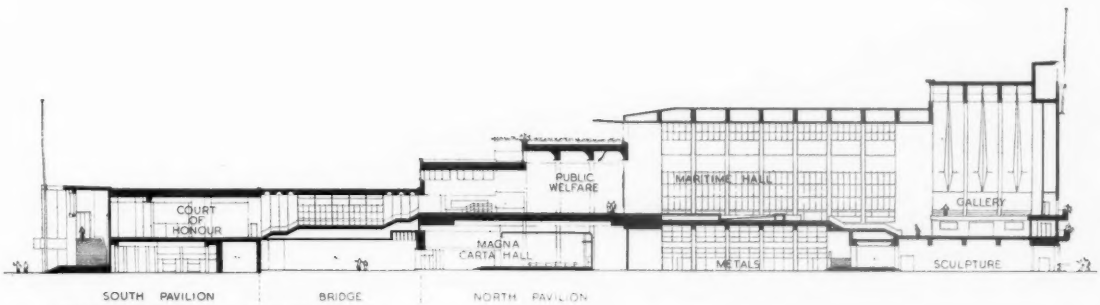
MEZZANINE



GROUND FLOOR



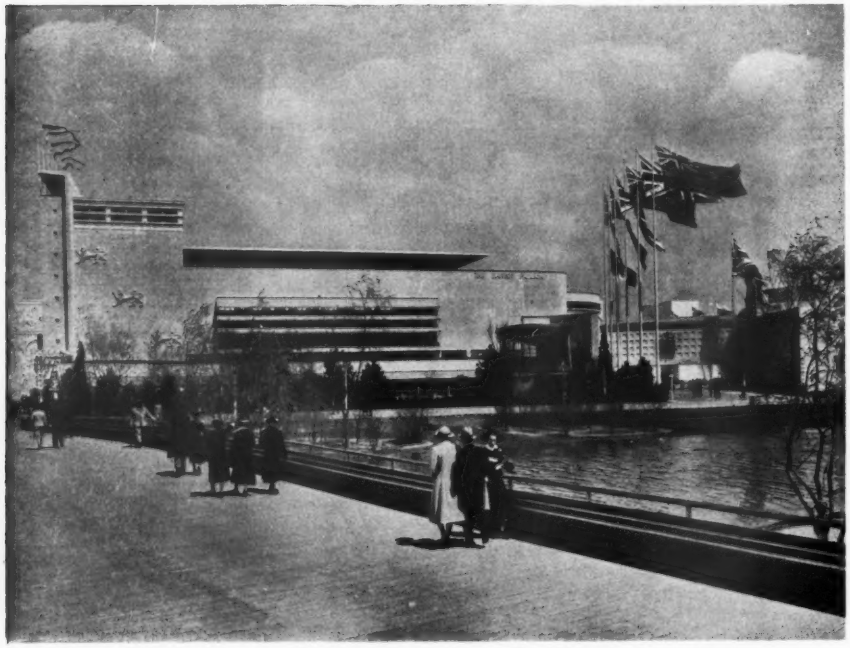
FIRST FLOOR



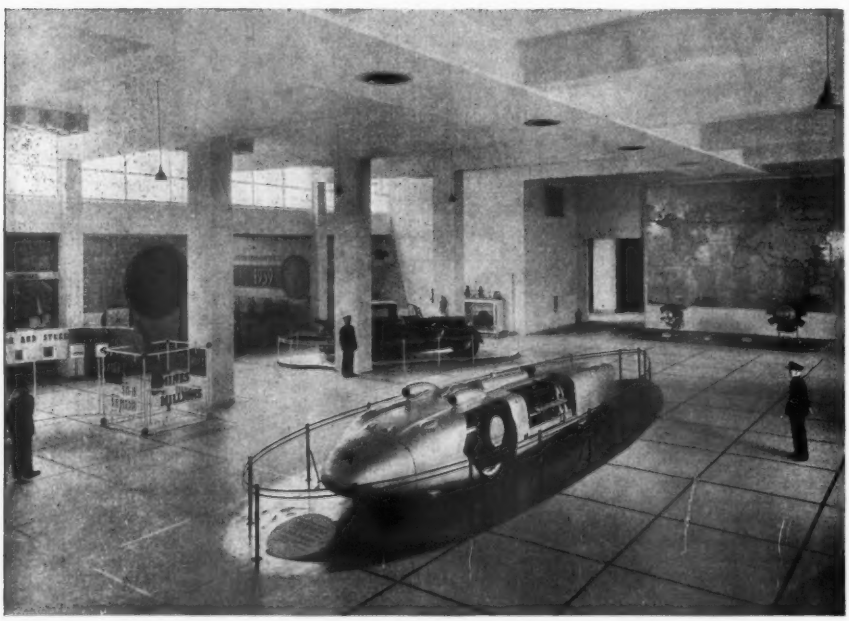
LONGITUDINAL SECTION

The section above shows a longitudinal section through the North Pavilion and the bridge, and a cross section on the entrance axis through the Court of Honour

The ceiling over the Maritime Hall is carried out in corrugated asbestos, and cantilevered over the roof terrace provided on the south side of the top floor



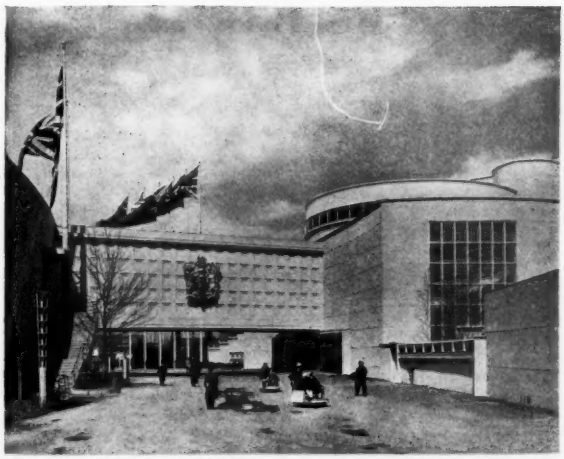
From the south-west, showing the relationship between the two pavilions, and the bridge linking them. At the bridge end of the main pavilion is the bandstand overlooking the garden



The Hall of Metals on the ground floor. In the foreground is Captain G. E. T. Eyston's "Thunderbolt." The wall map in the background is in copper, and shows British air routes

The display work in this hall is by the Reimann School and Studios

RIGHT : *The Maritime Hall, with the map in the foreground and Maurice Lambert's statue in the background. Beneath the statue can be seen the drop in level to the mezzanine, housing the "Attractions of Britain" section*



ABOVE : *"Westminster Bridge," linking the North entrance pavilion on the left with the main pavilion. The main exit to the pavilion is on the right, immediately under the bridge*

BELOW : *The bandstand. The wall behind shows the rectangular patterning of the rendered plasterboard facing to the building*

SUB-CONTRACTORS AND SUPPLIERS IN ENGLAND

General Electric Co., Ltd., Best & Lloyd, Ltd., A. C. Utilities, Ltd., Davies Bros., electric light fittings ; Williams and Williams, Ltd., metal windows ; Furdecor, Ltd., soft furnishings ; D. Burkle & Sons, Ltd., Tibbenham, Ltd., joinery ; Beck & Pollitzer, Ltd., awnings ; Keystone Paint and Varnish Co., paint ; British Thomson Houston Co., cinema apparatus ; E. J. & A. T. Bradford, Ltd., models for crowns ; Starkie Gardner, Ltd., metal doors ; N. F. Ramsay, Ltd., door furniture ; Morton Sundour Fabrics, Ltd., wall coverings ; Runnymede Rubber Co., rubber floorings ; Cement Marketing Co., Ltd., ivory white Cullamix with scraped finish for exterior ; F. Dejong & Co., plaster models ; Pilkington & Son, glass ; Frederick Sage & Co., showcases, etc. ; Court Studios, Ltd., dioramas.

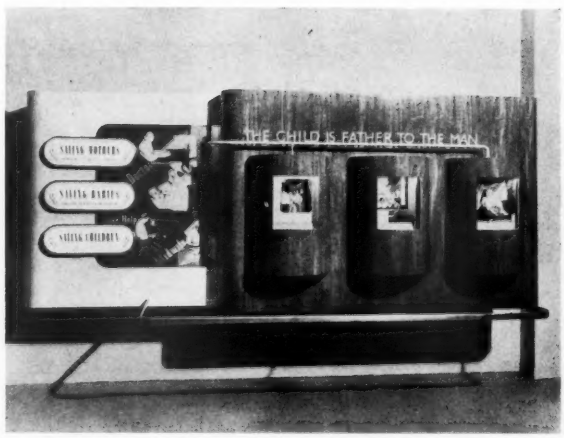
LEFT : *The café, or " British Buttery," at ground floor level, overlooking the garden*

sculpture and picture gallery, showing the work of British artists of the present and immediate past. The walls are hung with a new wall cloth, a textile applied like wallpaper, an interesting solution to the problem of picture backgrounds. On the mezzanine level above this is the " Attractions of Britain " section, the British Railways and Travel Association Bureau, and the " Architecture in Britain " display of photographs of contemporary buildings.

The café at ground-floor level (" The British Buttery ") has its walls lined with mirrors to reflect the English garden outside. This café and the cinema are both completely air-conditioned.

The Hall of Metals, into which visitors pass from the Sculpture Gallery, has windows on to the terrace and garden, and leads to the Magna Carta Hall, with its Lincoln original on the centre dais. This is the last hall in the circulation, the main exit being under the first-floor bridge which links the two pavilions.

The building is steel framed, on concrete foundations resting on wooden piles which project into concrete bases. It is faced externally with American plasterboard fixed to wooden studs on a steel frame. The plasterboard is in rectangles divided by a recessed joint formed with the same material, and is finished with a cream rendering containing particles of mica.



Display unit in the Social Services section, designed by Misha Black ; associates Thomas Gray and Kenneth Bayes [A.]. The display deals with Infant and Maternity Welfare. The three drums on the right each contain four stages ; a screen carrying descriptive lettering passes over the proscenium concealing the changing from one stage to another. The photomontage and " stage sets " were designed by John Barker

THE INSTITUTE'S APPEAL

The following is the eighth list of donations and increased subscriptions received up to 3 June in response to the appeal issued to all members and honorary members and students on 16 December 1938.

Members who are contemplating making an increased payment of subscription whereby the amount of the increase will be payable to the appeal fund are reminded that if they are prepared to enter into an agreement for the payment of such increased subscription for a period of seven years or more they will be entitled to deduct income tax at the standard rate from the amount by which the subscription is increased.

Full particulars were published in the issue of the JOURNAL for 6 February, and can be obtained on application to the Secretary, R.I.B.A.

DONATIONS

	£	s.	d.
W. E. Alexander [*Student*] ..		10	6
J. McClure Anderson [*F.*] ..	5	5	0
Richard C. Ball [*L.*]	5	0	0
Roger H. Bell [*A.*]	2	0	0
H. C. Boardman [*A.*] ..	1	1	0
C. W. Brown [*A.*], 2nd Donation	5	0	0
Cape Provincial Institute ..	50	0	0
R. F. R. Day [*A.*] ..	5	5	0
C. P. Walgate [*A.*] ..	2	2	0
L. A. Elsworth [*A.*] ..	2	2	0
G. Nyman	2	2	0
John Perry [*F.*] ..	2	12	6
B. St. C. Lightfoot [*A.*]	2	12	6
F. M. Glennie [*F.*] ..	3	3	0
H. L. Roberts ..	2	12	6

	£	s.	d.	£	s.	d.
L. L. Small	2	12	6			
Brian Mansergh [*A.*]	2	0	0			
J. W. H. Farrow [*F.*]	9	9	0			
J. W. Farrow [*A.*] ..	6	6	0			
R. F. Ohlsson [*A.*] ..	2	2	0			
E. G. Hart [*A.*] ..	2	2	0			
J. A. Smith	1	1	0			
L. J. Smith	1	1	0			
Cape Provincial Institute		15	0			
John D. Carnegie [*A.*] ..				1	1	0
L. A. D. Church [*A.*] ..				3	3	0
F. A. Coles [*L.*]				1	1	0
T. H. Corner					10	6
J. P. Darby [*A.*]				1	1	0

	£	s.	d.
Brian A. Elam [*Student*] ..		10	6
R. Flavel [*A.*]	3	3	0
Sir John Forsdyke [*Hon. A.*] ..	3	3	0
A. Gillespie [*Ret. A.*]	1	1	0
W. J. N. Gregory [*A.*] ..	2	2	0
Morris Hooper [*A.*]	1	1	0
T. W. Knight [*A.*]	2	2	0
Gordon Leith [*F.*]	52	10	0
N. C. Mackey [*A.*]	5	5	0
W. D. Quirke [*A.*]		10	6
N. A. Royce [*Student*] ..		10	6
R. P. Sharman [*A.*]	2	2	0
G. F. Smith [*L.*]	1	11	6
F. H. Swindells [*F.*] ..	1	1	0
E. W. Turner [*L.*]	2	2	0

DONATIONS FROM R.I.B.A. ALLIED SOCIETIES

Plymouth Branch, Devon and Cornwall Architectural Society .. £5 5s. 0d.

INCREASED SUBSCRIPTIONS

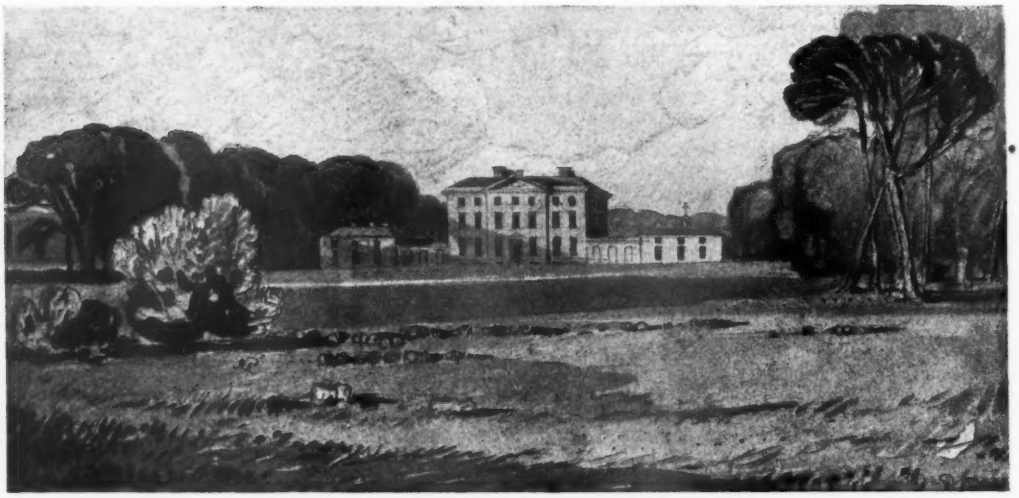
The following members and students have promised to increase their annual subscriptions by the amount and for the number of years inserted in brackets against the amount.

	£	s.	d.	
Gerald E. Burgess [*L.*] ..		15	0	(7)
Alfred F. Collins [*A.*] ..	1	1	0	a year until further notice
E. M. Powers [*F.*] ..	2	2	0	a year until debt is cleared

	£	s.	d.	
F. W. Powers [*A.*] ..	1	1	0	a year until debt is cleared
E. S. Powers [*A.*]	1	1	0	a year until debt is cleared
W. A. Ritchie-Fallon [*A.*] ..	1	1	0	a year until further notice

	£	s.	d.	
Roland Satchwell [*L.*] ..	1	1	0	a year until further notice
Felix Walter [*Student*] ..	1	1	0	a year until further notice
Norman Willis [*Student*] ..	1	1	0	(3)
Lt.-Col. Roland Wood [*A.*]		17	0	(5)

The donations and increased subscriptions or contributions received and promised up to 3 June represent a total of £6,344 18s. 10d. This amount does not include increase of subscriptions or contributions promised for which no definite period is stated.



No. 43. Salle House, Norfolk. 1818. Pencil and sepia

No. 42. Castle Acre. 1818. Pencil and Sepia

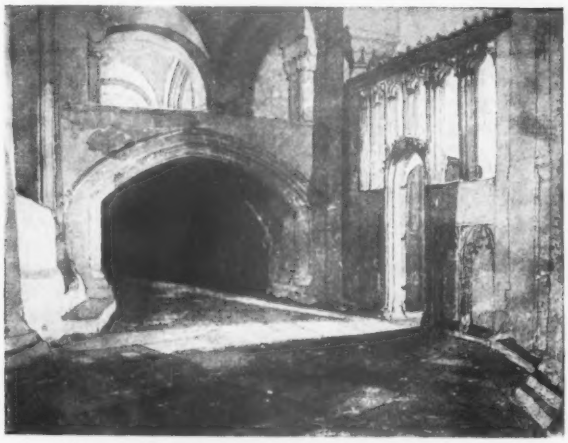
THE COTMAN EXHIBITION

IN THE HENRY FLORENCE HALL

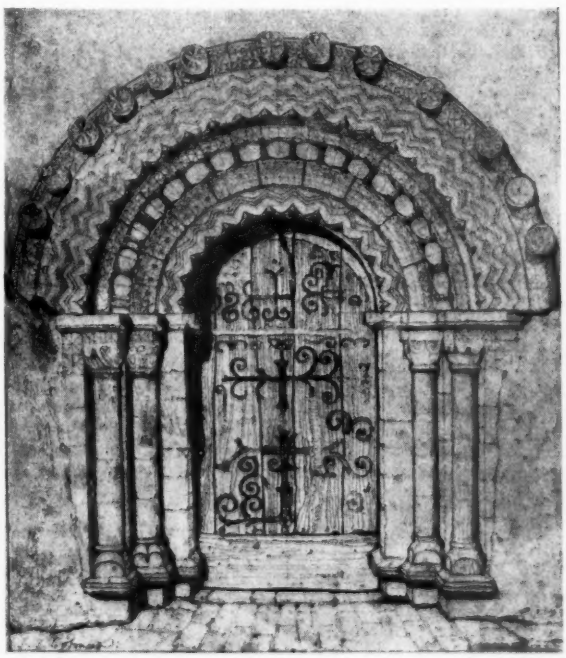
OPEN UNTIL 28 JUNE

Mr. Sydney Kitson started his collection of drawings by John Sell Cotman soon after the War when, owing to ill-health, he was forced to retire from practice. He rapidly made it not only one of the most interesting collections of Cotman's work in the country but the basis of his unrivalled collection of biographical material. The drawings received by the R.I.B.A., on a distribution which in some respects is provisional, are all the predominantly architectural items. They date from about 1803 (Brecon Bridge) to 1829 (N. Aisle, Norwich Cathedral). Many of the drawings are the originals of plates in his *Miscellaneous Etchings* (1811), and of the etchings in *Architectural Antiquities of Norfolk* (1818, reprinted 1838) and *Architectural Antiquities of Normandy* (1819, '20, '21).

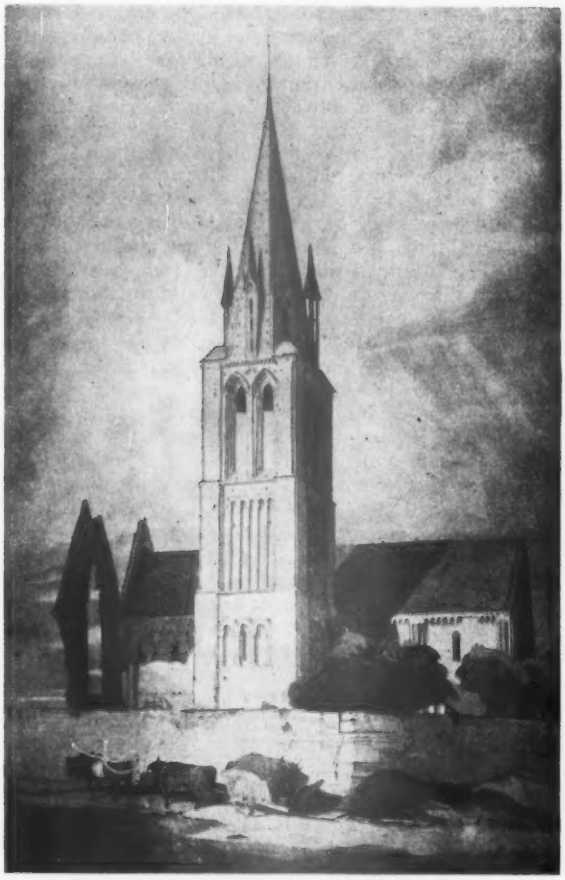
No. 24. Near Whitby. 1814. Pencil



No. 11. Norwich Cathedral. c. 1807. Water-colour



No. 26. North Doorway, Hales Church, Norfolk. c. 1814. Pencil



No. 74. Douvres. 1820. Pencil and sepia

THE THREE ARCHITECTS

A Play by HOPE BAGENAL [*A.*], *performed by the* R.I.B.A. DRAMATIC SOCIETY *on 20 and 22 May*

A play about architects, written by an architect, and performed before an audience composed largely of that profession, might well be considered to have only a local and restricted appeal.

But Mr. Hope Bagenal's new play, "The Three Architects," which was presented by the R.I.B.A. Dramatic Society on 20 and 22 May, has a great deal more than this. It presents a problem which can arise in any profession and any generation, which "comes home to men's Businesse and Bosomes," and sends the audience home still arguing for and against—always a sign of a worth-while production.

The architectural setting is not extraneous to the subject, but provides a natural medium for bringing out the conflicting ideals with the right emphasis. These are personified in the characters of the three architects—the senior partner, old Sir John Mercier, R.A., F.R.I.B.A., represents the classic, contemplative tradition, which believes in "sitting quietly and letting everything irrelevant go by." The young Jewish refugee, full of fire and creative force, brings out the transcendental idealism that looks only towards a future which shall have no link with past or present. Sir John's partner, Gilbert Gilbertson, F.R.I.B.A., stands somewhere between these two, and is typical of the present generation in that he can see both sides with equal force, but cannot decide which course should be his, and, though full of nervous energy and drive, is pulled this way and that by his varying emotions.

The whole of the action takes place in the architects' office, a particularly delightful setting reminiscent of some of those well known in the old tradition. Very much of a family affair this, for the junior partner is son-in-law to Sir John, his daughter acts as secretary, and his wife not only does her cutting out on the office drawing board but also on occasion holds the fort to important clients and gives them sound if unorthodox advice.

The junior partner has a rich woman client who is having large alterations made to her house, chiefly in order to occupy her time and mind, both almost empty, and who calls almost daily to discuss the position of the extra foam baths or the third sun lounge. The personal relationship between Gilbertson and his client shows some signs of getting out of hand. The main action, however, is concerned with the plans for a new school, which, in the absence of the rest of the firm on holiday, have been prepared by the senior—and almost retired—partner, and seem to prove that when the mice are away the cat will play, a habit which has caused trouble before in many offices.

The School Plans Committee is divided in its views, some approving the dignities of Sir John's spacious classicism and some strongly advocating something more modern and up to the minute. There is a magnificent scene where some of the committee meet the architects for discussion, and each gives his views according to his type, including the headmistress, who knows the kind of school she wishes to teach in, and the young refugee who bursts in on the discussion with a fiery appeal for a complete break with tradition and a building for the future, as if to say, throw this all away and start again!

Finally, Sir John's plans are accepted, but the funds available are insufficient. Gilbertson's rich client, after some shatteringly frank words from Mrs. Gilbertson, presents the sudden spectacle of a wrong woman gone good and announces that instead of spending her money on her house she will give it towards the building of the school.

Meanwhile the young man has won not only Gilbertson's daughter as his wife, but also his chance to fulfil his ideals in a new refugee colony, and Gilbertson gets a consolation prize for the loss of his client in a commission to build a hospital.

This is not a play of violent crises—the white heat is reached in the committee meeting, but the emotions released there do not lead to any cracking of the fabric of life. Except for this scene, the play suffered a little from slowness, and was inclined to drag in some places where a quickening of tempo would have helped to press the argument home. A longer run would, no doubt, have helped to remedy this, and it seems a pity that this interesting pay, full of real questions whose answers are everyone's problem, should not reach a larger public than these two performances can provide. The company as a whole reached a high level of performance, from which it is difficult to pick out anyone for special mention.

Mr. Halliburton Smith played the part of Sir John Mercier with his accustomed ease and dignity and brought out well the old man's wisdom and detached philosophy. Miss Carmen Smith made a very real person of Mrs. Gilbertson, trying to keep the balance between the office and the home. Gilbertson himself (Charles Crichton) expressed the distracted middle way most humanly.

Miss Enid Caldicott, as Mrs. Faber Lewis, had a difficult task in representing a foolish, self-centred woman who turns suddenly into one capable of appreciating a big idea and also of making a really generous gesture, but she managed to make her credible and even likeable. Miss Leverkus brought just the right touch to the part of the school mistress, one which could easily have become farcical if overplayed.

Mr. George Gneditch brought fire and conviction to his playing of the refugee, and Miss Prudence Smith, as Patience Gilbertson, gave an impression of efficiency combined with charm. Richard Hitch, Gilbert Kendrew and Miss Joan Seeds as committee members, and Nigel Tolson as the other aspirant for Patience's hand, gave excellent contrasts of character.

B. N. S.

Book Reviews

THE UR ZIGGURAT*

The point about the legendary story of the Tower of Babel is not so much the ambition to build to the skies, for this, after all, has been shared by most builders in all ages, but the success of the attempt, so successful indeed as to cause the intervention of the Gods themselves. A similar point about the few classical references to Ziggurats, Towers of Babel, seen by travellers to Babylonia is the insistence upon their prodigious height. There is certainly tradition for believing that the Ziggurat achieved unusual elevation, and throughout the history of archæology attempts have been made to restore this fabulous building. The front pages of our architectural histories all have their gigantic stepped pyramids, overpowering in conception and too often incapable of being taken seriously, for until comparatively recent times the facts have been too slender for a restoration to be more than an exercise in imagination.

It is true that the remains of a staged tower at Khorsabad were sufficient to enable Place and his architect, Felix Thomas, in 1867 to establish reasonably the northern type, a pyramid divided into seven stages by an ascending spiral stair, each stage a different colour ; but the E-Temenanki Ziggurat at Babylon remains as a ground plan only, and the Temple of Bel at Borsippa is a formless core of vitrified brickwork. For the rest, reliance was placed on the imperfect drawings of temple buildings on bas-reliefs ; contemporary texts, especially the inscription discovered by George Smith, describing the E-Sagila temple at Babylon ; the records of such travellers as Herodotus, Diodorus and Strabo ; and the reports of ruins seen and crudely uncovered by such explorers as Rawlinson, Rich, Layard and Oppert during the last century. These have been the ingredients for a series of essays in restoration by Place, Koldewey, Dombart, Chipiez and others.

It needed the discovery of a less denuded building and a more careful and unprejudiced approach to produce a result which could be accepted with confidence.

At last Sir Leonard Woolley has published the record of his work on the Ziggurat at Ur during twelve years of excavation. His report describes the discoveries made in clearing the site of the Ziggurat, the great court of the god Nannar and the terraces and buildings surrounding it through the various periods of rebuilding from the archaic 1st dynasty of Ur down to the last neo-Babylonian rebuilding.

At once it can be seen that the long-awaited conditions have been met, and enough of the building still remains to make a restoration of at least one period imperative.

The Ziggurat underwent two main reconstructions, the first in the 3rd dynasty of Ur (2300 B.C.) and the second by Nabonidus in the sixth century B.C., and Woolley has been able to establish that the 3rd dynasty building bore little or no resemblance to the later version, and no resemblance to the building seen and described by Herodotus. The stumbling block of the early theorists had been this very confusion of periods. Woolley's problems were thus made easier, but in a sense his difficulties were increased, for, robbed of even the few scanty clues of the earlier restorers, he has had to rely solely on the site evidence for every detail of his restoration, and even here the work of Taylor at the end of the last century unfortunately destroyed a lot of valuable evidence.

In spite of this, his detailed description of the evidence and his deductions from it can be followed step by step, and with his conclusions there can be little to quarrel.

The surviving portion of the building is in itself well worth study. Built with a precision associated with Greek masonry, the rectangular sides on plan show an optical curvature of 0.50 m. in the length of 62.50 m., and in addition to being battered, the walls have an entasis of 0.11 m. in a height of 10 m. The whole structure is in solid brickwork, the core being in mud brick and belonging certainly to an archaic period and faced with well-burnt bricks set in a bitumen mortar, recalling the Biblical description, " and they had brick for stone and slime (bitumen) had they for mortar."

Weeper holes were left at regular intervals in the walls for drainage from the first terrace, on which were planted trees. There is a document relating to the clearing of the terraces below of the branches of trees, and in this connection Woolley writes, " The idea that the sacred grove was on the Ziggurat itself is quite in keeping. Essentially the Ziggurat is a high place, and the Gods thus honoured were mountain Gods—one must suppose that their original temples were on hill or mountain tops such as Nature has omitted to supply in the lower Euphrates valley. These towering masses of brickwork were artificial mountains, and that such should have been planted with trees is but carrying the basic idea of them to its logical conclusion."

Three great stairs give access to the first terrace, and from there smaller stairs ascend through two other stages to the top terrace on which is set the shrine. The shrine was in bright blue glazed brick, the upper stage was red, the base was painted black, and the great courtyard of Nannar from which it rose was whitewashed. " The four colours have their astrological

**Ur Excavations. Vol. V : The Ziggurat and Its Surroundings.* By Sir Leonard Woolley. 4to. xiv + 150 pp. + 88 plates. Joint Expedition of the British Museum and of the University Museum, University of Pennsylvania, to Mesopotamia. 1939. £3 12s. 6d.

significance representing the underworld, the earth, sky and heaven," and in addition they must have given to the building a most spectacular and impressive appearance.

But with the last neo-Babylonian version of the Ziggurat, after the rebuilding by Nabonidus, we are back again in the sphere of speculation. The evidence for this later building is not really sufficient, and once again the classic recipe has been brought into service—the ascending stair, the seven stages, and the resting places of Herodotus. The lowest stage and the three stairs were re-used unchanged, and the first terrace and limits of the second stage have been established by the presence of a curious red clay used for the bricks ; but the upper stages, their height, their approach and the nature of the building at the summit cannot be determined with certainty. A calculation of the amount of debris found around the base was made, but the deductions, in the absence of more concrete evidence, are approximations only. Woolley's restoration is more convincing than the earlier essays because less ambitious : the stages do not rear into the air so precipitously : more regard has been paid to the nature of the material and its limitations, and as Woolley admits, " if the height be thought still excessive, it could be cut down by two stages without loss of symmetry."

The new restorations are the work of Sir Leonard Woolley and his architect, A. F. E. Gott ; but during the twelve years of excavation his former architects, F. G. Newton (who was responsible for the first and now rejected restoration), A. S. Whitburn and J. C. Rose, as well as his archæological staffs, have all contributed to the work.

The reconstructions have been beautifully drawn by Miss Duffell, but why has the Ziggurat been shown rising from a barren desert when it must at all periods have been surrounded by a complex of low buildings and terraces which would have greatly increased its scale and magnificence ?

The report is profusely illustrated, but it must be admitted that the photographs are of unequal quality, while the half-dozen or so drawings in the text could have been redrawn with advantage. The lettering of the plans, all sorts and sizes of letters have been used, is disturbing, and again they were surely worth relettering in a uniform type. But these are minor criticisms of presentation only, and Sir Leonard Woolley is to be congratulated in publishing this important contribution to Mesopotamian architecture and in giving the Tower of Babel a new lease of life.

J. C. R.

CONTEMPORARY HOUSE ARCHITECTURE

THE BOOK OF THE MODERN HOUSE—A PANORAMIC SURVEY OF CONTEMPORARY DOMESTIC DESIGN. *Edited by Patrick Abercrombie. 4to. 378 pp. inc. 244 pl. London : Hodder and Stoughton. 1939. 20s.*

This is a selective survey, as Professor Abercrombie describes it, of our domestic architecture of the last twenty years. It is divided into fourteen chapters, dealing with the country house, the country cottage, the town house, the suburban house, the ready-built house, the " Council house," and the seaside house ; and with the setting of the house on its site, the contemporary house, the insides of the house (furniture, decoration and bathroom and kitchen), and with some of the smaller houses of America and Sweden.

Its four hundred pages offer an evidently miscellaneous entertainment. The austerely logical may feel a little impatient that, in a " panoramic survey of contemporary domestic design," one of the fourteen chapters should be specifically labelled " the contemporary house " ; or that foreign comparisons should give us no news of France, Holland or Germany. But Professor Abercrombie's introduction will disarm him, unless he is determined to be dissatisfied. It cannot be easy to be completely logical in the treatment of a " Parent Universe " such as is the subject of this book. He has selected his team of contributors with discrimination, and ridden them with an easy hand. And the result is a rich collection of works, great and small, nearly all with something to say to any architect who studies them.

But there is one cardinal matter in which the policy of a book like this should surely be consistent : the provision of plans. Without a plan a photograph can only say to the architect, " Here is a building I would like to study." It is only half-illustrated for him, unless there is a plan to show him how these particular pieces of space were put together to produce the face which the photograph reveals. For the most part the book is in this respect beyond reproach, but the first chapter has no plans, nor have the tenth or the fifth. In the latter, one or two instances of the " universal " plan mentioned in the introductory essay would have been sufficient.

A short critique of the individual chapters would be inclined to rank most highly the presentation of the work shown in chapter IV. How grave and decent are these suburban houses. And they are of a size to be well shown by a photograph and a plan. So, too, are the " Contemporary Houses." Here, among much that is interesting and fresh in the disposition of the parts, are some odd planning insensibilities—in one a door opens on you as you sit round the fire ; in another, the maid, to answer the door (or to have her bath) must pass through the dining-room or the downstairs lavatory. Of the seaside houses, some snuggle down against the gale, others take it like yachts with a frolic welcome. But are their thin walls, so white and virgin against the black shadows in the photograph, really going to stand up to winter storms and the ceaseless urge of water to penetrate, year by year ? The ready-made houses are sober ; but should have been put to comparison with the smugly vulgar standard house of the speculating builder. The chapter on the setting of a house shows that for landscape (unless it has the Villa Medici modelling of the Holmbury St. Mary Garden), a photograph is as unrevealing as it is for interiors and for furniture, where you need the sense of things being around you, and also the colour. The cottage illustrations suffer from being scrappy and small. The country houses (with some beautifully reproduced water-colours) maintain the rich and gravely tranquil standard which our fathers established. The Swedish chapter is disappointing : the American raises the relevant question of the standardised pre-fabricated dwelling. When we come to the " engine-room " of a house, the kitchen and its equipment, I wish we could have been told what covering to put on the floor, what will keep ever clean and yet be silent and kind to the feet ; and how to deal with the subtle creep of slimy water (which no drip will stop) between the sink-edge and the draining-board.

A leisured study of these pages, of these samples of the many thousand thoughtful schemes of minor building which have come to birth in the last twenty years, may well leave the reader with three impressions. He will be reminded of that careful, ordered and yet serene habit of our race of civilising and making very personal a piece of land—whether

it be a hillside in the Cotswolds or a graveyard in Picardy—a habit which has over the centuries given its character to the whole of England. He will note how the flat-roofed house, with its unshackled plan, is re-embodying that sense of excitement, of adventure, in building (look at Jolwynds, or the Kingston house, or Shipwrights, or the shadowed decks by Carlyon Bay) which the Elizabethans knew and Beckford magnificently re-sought. Thirdly, he will remember that four million small houses have grown over England since the war; and that the least successful (if there be one less deserving than another) of all those architects whose work is illustrated in these pages could, if his advice had been sought by those who were to build them, have made that vast accretion a comely thing instead of what it is. Sometimes it seems as if the whole profession were playing its careful music in a tent apart, while outside is the clamour of a huge fair, quite happy, quite indifferent.

WILLIAM G. NEWTON [*F.*]

ARCHITECTURE OF THE CINQUECENTO

STORIA DELL' ARTE ITALIANA. Vol. XI. Parte II : L'ARCHITETTURA DEL CINQUECENTO. *By Adolfo Venturi. La. 8vo. xxiv + 996 pp. Milan : Hoepli, 1939. 200 lire.*

A new volume of Professor Venturi's *Storia dell' Arte Italiana* is an event of importance, an event of importance which has happened with impressive regularity since 1901. A year ago the first part of Volume XI, dealing with the architecture of the *Cinquecento*, covered the work of Leonardo, Bramante, Sansovino, Raphael and his pupils, Peruzzi, Serlio, the Sangallo, and of lesser architects in northern and central Italy.

The second part of Volume XI, which has just been published, deals with the architecture of the *Cinquecento* with the same magnificent prodigality. In the volume's 996 pages Professor Venturi deals first with Michelangelo, and then successively with the works of the *manieristi* of Florence, the followers of the Tuscan masters, and then with the *manieristi* of Rome, illustrating his text by over 900 clear photographs and architectural drawings. For many English architectural students the book will be of chief value as containing the best collection of photographs that can be found anywhere of not only the better known buildings and the work of the better known architects, but of minor buildings and architects. Michelangelo's work is illustrated by over two hundred pictures, among which are reproductions of several of the important drawings in non-Italian museums and photographs of architectural detail beautifully taken to bring out the architectural qualities of each particular feature.

In the second, third and fourth parts dealing with the minor architects a regular plan is followed of prefacing each section by a chronological tabulation of the career of the architect concerned. This is followed by Professor Venturi's closely critical study, which is illustrated at every point by the excellent photographs to which reference has been made above.

At the end of the volume there is a short chapter on the "false picturesque" in Roman architecture of the *Cinquecento*; the work of Zuccheri, Bigio, Annibale de'Lippi, Ligorio, Mazzoni.

Once more English and all other students of Italian Renaissance architecture have reason to be grateful to Professor Venturi and to his publishers for having done so much and done it so well.

U.S. ARCHITECTURAL GRAPHIC RECORDS

HISTORIC AMERICAN BUILDINGS SURVEY : *Catalogue of the Measured Drawings and Photographs of the Survey in the Library of Congress, 1 January 1938. Compiled and edited by J. P. O'Neill. 8vo. 264 pp. + 19 pl. U.S. Department of Interior. 1939. 50 cents.*

The Historic American Buildings Survey has done for the U.S.A. what has not yet been done for Britain, though our task is naturally greater. The records include over 2,200 buildings measured and drawn in uniform style and photographic negatives of 3,800 buildings.

The Survey was made through the organisation of the American Institute of Architects. A district officer was appointed for each area who selected the buildings deserving record and an index of all these was formed in the Department of the Interior. Drawings and photographs were made in order of architectural significance and risk of destruction.

The catalogue is well produced with the entries arranged alphabetically by States; there are 19 photographs and a large number of measured drawings included.

MODERN BRITISH SCULPTURE

R.B.S. MODERN BRITISH SCULPTURE. *4to. xii+112 pp. London : Country Life. 1938.*

"The history of art is for ever repeating examples. . . ." This dictum of Mr. Edmund Gosse is to be found in the anthology of passages which prefaces a new book published by the Royal Society of British Sculptors. Its truth is amply illustrated by the contents, for here are photographs of works which, though varied in style and purpose, illustrate afresh the constancy of the subject matter of the sculptor's art. It is living form and above all human form. Nothing else seems to afford the same scope and interest. As Mr. Gosse says later in the same passage: "Sincerity and the study of Nature must be the leading forces of sculpture if it is to regain its authority over human thought." Such a belief clearly inspires the artists in the works illustrated and also the Society in the selection they have made and presented to the public.

Nearly all the living members of the Society, as well as a few recently dead, are represented by one or more works. Some of these already occupy positions in museums, some have been erected in gardens or public places and others have been expressly executed to take their place on buildings or monuments. There is also a representative amount of portraiture.

The principal regret of the architect will be that too few of these sculptures have been designed as essential adornments of buildings or as features of public squares or gardens. So many are isolated pieces, while some of the fragmentary studies, interesting and beautiful as they are, must be purely academic in purpose. These artists could and should be contributing far more to the beauty of present-day architecture and it is architects who are largely to blame for this lack of opportunity.

Examples of sculpture designed for architectural settings are to be found among the works of Sir William Reid Dick, Mr. Alfred Hardiman and the late Mr. Derwent Wood. All of these are of special interest and individual character. Mr. Gilbert Bayes, Mr. Alfred Drury, Mr. Alfred Turner and the late Mr. Charles Jagger are represented by impressive sculptured memorials. Mr. Gilbert Ledward and Mr. William Macmillan show figures of "marble, soften'd into life" which in their delicacy and beauty of craftsmanship are of outstanding artistic excellence. Mr Richard Garbe's statuettes in silver and ivory are distinguished by grace and eclectic charm. Nearly all the sculptures show a high standard of technical skill; some, however, lack inspiration.

Altogether, over sixty artists are included and their names and addresses are contained in an index at the end. It is a pity that no details of materials and sizes of the sculptures have been given, nor any particulars of other works. Such addenda would have added value to the publication as a record. The effective presentation of the sculpture largely depends upon the photography. This, in some cases, is disappointing.

The book is one which will be of value to architects and all who are interested in present-day sculpture. Considerable care has been given to its compilation and its *format* is attractive and sensible. The Society's last publication of this sort was in 1921. The present volume indicates their achievements since that date and upon these they are to be warmly congratulated.

HORSTED KEYNES—A PARISH HISTORY

HORSTED KEYNES, SUSSEX : THE CHURCH AND PARISH OF ST. GILES. *By F. Stenton Eardley. 8vo, 150 pp.+15 photographs. London : Macmillan. 1939. 3s. 6d. cloth, 10s. vellum.*

This is a well-written and informative guide written by the Rector of the Parish. Horsted Keynes lies on one of the ridges that run across the Sussex Weald south from Ashdown Forest. The recorded history dates from Saxon times, when a wattle and daub church stood in an earthwork ring, which can still be traced. The Norman tower of the present church, which incorporates parts of a stone Saxon church, is the oldest building of the district ; in the twelfth century the chancel and south transept were rebuilt and in the fourteenth the north transept, the chapel to the nave and a chantry were built and other important alterations made. Subsequently, as in almost every English parish church, alterations were made and piecemeal restorations carried out which substantially changed the appearance of the building, but preserved enough of the old to maintain historical continuity and leave for us to-day a document of architectural and social history which in more ways than those concerned with the religious history of the parish is a focal point of all that Horsted Keynes was and is. The church buildings are described in two chapters occupying about a quarter of the book ; in the remainder various documents in possession of the church and the church plate are described and an interesting day book kept by Giles Moore, one of the seventeenth-century rectors, in which he faithfully records his domestic expenses and his journeys, is reprinted.

Mr. Stenton Eardley has written an excellent and informative guide, but it is a pity that archæologists, even after every apology, stop their history so far short of the present times, which socially and architecturally are no less important than the distant past. Also a book of this kind with no plan of the church is definitely incomplete.

BUILDINGS WORTH KEEPING IN COLCHESTER

SCHEDULE OF BUILDINGS OF ARCHITECTURAL INTEREST IN COLCHESTER. *Colchester Civic Society. 8vo. 16 pp. 1938.*

With increasing frequency English towns are growing aware of the value of the good architecture that remains in their streets. This pamphlet is Colchester's attempt to record its best buildings in order to improve civic consciousness and preserve whatever is worth preservation. The houses, mostly built as private houses, are listed by streets, with remarks on their condition and architectural features, those of exceptional interest being marked with an asterisk.

It is a pity that more use was not made of the opportunity given by the publication of the pamphlet to provide in the preface a fuller description of the intention of such a schedule. The schedule as it is will be useful for members of the Society, but will hardly contribute much to the conversion of the local dead-heads.

FLETCHER'S "QUANTITIES"

QUANTITIES. By Banister Fletcher. *11th Ed. revised by A. E. Baylis. 8vo. 700 pp.+40 plates. London : Batsford. 1939. 16s.*

The 11th Edition of Fletcher's *Quantities*, edited by A. E. Baylis, is substantially a reprint of the 10th Edition with the important addition in Appendix C of an analysis of the latest revised standard method of measurement (3rd Edition, 1935), and, in Appendix D, of the Report of the Committee of the Institution of Civil Engineers on Engineering Quantities. The revised standard method of measurement is now generally accepted by the building industry. Mr. Baylis notes with justifiable satisfaction that some of the changes bring standard practice into line with various principles which he enunciated in his introduction to the 10th Edition.

The tables in Appendix B of wages rates and prices of materials have been revised, and a table showing the general comparative cost of building work since 1914 extended to include the years up to February 1939 ; it shows that the present cost index is 200, compared with 100 in 1914, 333 in 1920, and 195 in 1937. A few small errors in the 10th Edition are corrected in a footnote to the introduction and a larger revision made by a pasted-in slip in the section on the group method of taking-off a lead flat.

Fletcher's *Quantities* is a standard work, and this new issue is welcome.

STEELWORK DATA

STRUCTURAL STEELWORK, 1938. TABLES AND DATA. *Redpath Brown.*

Messrs. Redpath Brown's data book is well known. The new edition broadly follows previous models. Properties and safe loads are given for joists and joist compounds as beams and as stanchions, filler joist floors, solid round columns, slab bases and grillages. Other tables relate to rivets and bolts, weights of sections and materials, mathematical tables and conversion equivalents.

The work is based on the company's main handbook, *Structural Steelwork, 1938*, and relates to the British Standard Sections as revised in 1932. The calculations are in accordance with the requirements of the latest British Standard Specifications.

SPONS' POCKET BOOK

SPONS' ARCHITECTS' AND BUILDERS' POCKET AND PRICE BOOK, 1939. *Edited by Clyde Young [F.]. 66th ed. Sm. 8vo. 274 pp. London : Spon. 5s.*

The new edition of *Spons' Pocket Book* follows the model of previous years. The prices have been revised throughout " to accord with market values at the time of going to press," but we should like to plead again for revision of the cost of buildings section, in which as a guide to cube costs we are given the figures for the Law Courts in London built in 1857, the Manchester Assize Courts, St. Thomas's Hospital, etc. These prices may by chance approximate to current prices, but they do not give confidence.

FOWLER'S POCKET BOOK

FOWLER'S ARCHITECTS', BUILDERS' AND CONTRACTORS' POCKET BOOK. *2nd Ed. By William Fowler. 12 mo. xiii + 929 pp. Manchester : Scientific Publishing Co. 1939. 5s. 6d.*

This is a remarkably comprehensive data book, with information on weights and measures ; the work and materials of the building trade ; sanitation, water supply, heating, lighting and acoustics ; architectural building and surveying practice ; iron and steel and reinforced concrete construction and scientific data ; and, finally, building byelaws.

The architect who has it in his pocket will save his memory many uncomfortable moments.

Review of Periodicals

Attempt is made in this review to refer to the more important articles in all the journals received by the Library. None of the journals mentioned are in the Loan Library, but the Librarian will be pleased to give information about price and where each journal can be obtained. Members can have photostat copies of particular articles made at their own cost on application to the Librarian.

Normally the journals referred to in this review, all of which are in the R.I.B.A. reference library, cannot be borrowed. Members are, however, asked to encourage their local public libraries and their local society's library to take as many journals as they can afford; and they are asked, for the convenience of local members, to notify the R.I.B.A. of what journals are known to exist in public or private hands in their own neighbourhood.

SCHOOLS

ARCHITECT AND BUILDING NEWS. *1939. 26 May. P. 200.*

ARCHITECTURE ILLUSTRATED. *1939. May. P. 146.*
Greenford County School, by W. T. Curtis [*F.*] and H. W. Burchett [*F.*], a mixed school with 533 places.

ARCHITECTURE ILLUSTRATED. *1939. May. P. 138.*
New Convent and School, Charlton, London, by W. J. Gregory [*F.*].

IRISH BUILDER AND ENGINEER. *1939. 13 May. P. 387.*
The Botanic Public Elementary School at Belfast, by R. S. Wilshere [*F.*], with accommodation for 550 pupils.

ARCHITECTURAL RECORD (NEW YORK). *1939. May. P. 40.*
Sierra Union High School, California, by Franklin and Kump, designed to control the heat and glare of the sun and to resist earthquake shocks.

ARCHITECTURAL FORUM (NEW YORK). *1939. May. P. 351.*
Secondary Schools in the U.S.A. Plans and illustrations of Gamaliel Bradford Senior High School, Wellesley, by Perry, Shaw and Hepburn; High School, Hamden, by R. W. Foote; High School for Liberal and Household Arts, Hollywood, by Marsh, Smith and Powell; High School at Idaho Springs, by Frewen and Morris; and Senior High School at Houston, by Staub, Franzheim, Cato, Payne and Glover.

SCHWEIZERISCHE BAUZEITUNG (ZURICH). *1939. 29 April. P. 207.*
Gymnasium with spectators' gallery, attached to a school at Neuhausen, by F. Käser.

ARCHITEKT S.I.A. (PRAGUE). *1939. No. 1. P. 9.*
Polytechnic school at Zurich, by Salvisberg.

ARCHITEKT S.I.A. (PRAGUE). *1939. No. 1. P. 2.*
Convent-school by Nevsimal and Vanicek.

ARQUITECTURA (MEXICO). *1939. No. 2.*
The buildings of the Beaux Arts School in Paris. A number of students' drawings are also reproduced.

UNIVERSITY

REVISITA DE ARQUITECTURA (BUENOS AIRES). *1939. No. 3. P. 106.*
Large project for layout and buildings of Brazil University at Rio de Janeiro, by M. Piacentini and V. Morpurgo.

LABORATORY

ARCHITECTURAL RECORD (NEW YORK). *1939. May. P. 50.*
Film laboratory for developing and printing motion-picture film, by B. Teitelbaum. Plenum ventilation.

EXHIBITIONS

ARCHITECT AND BUILDING NEWS. *1939. 26 May. P. 211.*
The British Pavilion, New York World's Fair, by Stanley Hall & Easton and Robertson [*FF.*].

FORM (STOCKHOLM). *1939. No 4. P. 83.*
Excellent small Swedish stand at the San Francisco Golden Gate Exhibition.

SCHWEIZERISCHE BAUZEITUNG (ZURICH). *1939. 6 May. P. 212.*
Plans and photographs of some of the buildings at the Zurich Exhibition 1939.

ARCHITETTURA (ROME). *1939. March. P. 173.*
Building for the "Turin and the Corporate State" exhibition, by E. Sotsas.

CIVIC

ARCHITECTS' JOURNAL. *1939. 25 May. P. 871.*
Tunbridge Wells Civic Centre, by Percy Thomas and Ernest Prestwich [*FF.*].

HOTEL

ARCHITETTURA (ROME). *1939. March. P. 169.*
Interesting small hotel on the shore of Lake Piediluco, by S. Bravetti.

MOUNTAIN BUILDINGS

L'ARCHITECTURE D'AUJOURD'HUI (PARIS). *1939. April.*
Special number on buildings and other constructions on mountains. Section on old buildings. Modern chalets and villas in France and Switzerland. A large number of mountain hotels, ranging from the large luxurious hotel to the boarding house; and a number of refuges and huts, including the mountaineer's simple snow igloo. Section on big sports centres, illustrating "Sun Valley," U.S.A., and Zakopane, Poland. Section on the equipment of Winter Sports stations, funiculæ, skiers' lifts, etc. Finally a section on mountain urbanism—"It is not only the town that renders urbanism necessary. The mere fact that a territory is inhabited by humans necessitates foresight, organisation and composition."

OFFICES, ETC.

ARCHITECTURAL FORUM (NEW YORK). *1939. May. P. 330.*
Offices for the Meyercord Co., Chicago, by Abel Faidy. The company manufacture transfers which are used on wallboard in imitation of marble and rare woods, and these have been used in the decoration of the offices.

ARCHITEKTURA I BUDOWNICTWO (WARSAW). *1938. No. 11-12. P. 393.*
Large National Bank at Wilnie, by S. Galezowski and J. Pankowski.

SHOPS

ARCHITECTURAL DESIGN AND CONSTRUCTION. *1939. May. P. 176.*
Reference section on stores, shops and showrooms. Departmental stores, trends in shop construction, technical data, and illustrations of several buildings, including Rootes' Motor Showrooms, Maidstone, by Howard and Souster, and Ciro's Jewellery Shop, Old Bond Street, by Serge Chermayeff [*F.*].

ARCHITECTURAL RECORD (NEW YORK). *1939. May. P. 36.*
Department store in Miami, Florida, by E. L. Robertson and

J. R. Weber, comprising a new seven-storey building, the remodelling of an existing structure, and provision for further extension.

INDUSTRIAL

BOUWBEDRIJF EN OPENBARE WERKEN (THE HAGUE). *1939. 3 February. P. 29.*
New buildings for the " K.E.M.A." at Arnheim, by R. L. A. Schoemaker, H. Fels and G. Hamerpagt. Electrical laboratories and machine buildings.

BAUKUNST (BERLIN). *1939. No. 5. P. 133.*
New factory, workshop, and administrative buildings for the Henschel aircraft works, by O. Biskaborn.

WELFARE AND COMMUNITY BUILDINGS

ARCHITECT AND BUILDING NEWS. *1939. 2 June. P. 237.*
Kodak Social Centre, Wealdstone, by F. J. Wills [*F.*], accommodating a hall seating 900, canteens, billiard room, lounge, lecture hall, library and photography rooms.

ARCHITECT AND BUILDING NEWS. *1939. 26 May. P. 215.*
The Building Centre Holiday Camp Competition ; report by the winners, R. Sheppard and Jean Shufflebotham [*AA.*].

THE BUILDER. *1939. 26 May. P. 991.*
Extensions to " Clubland," Camberwell Road, by A. Llewellyn Smith [*A.*]. The extensions to this boys and girls' club comprise assembly hall, gymnasium, room for meetings, workshop, room for music and dramatics, and a canteen.

АРХИТЕКТУРА (MOSCOW). *1939. No. 5. P. 39.*
The Palace of Culture for the Gorbounov factory at Moscow, by J. A. Kornfeld. The building includes a large theatre with a finely equipped stage.

RECREATION BUILDINGS

ARCHITECTURE ILLUSTRATED. *1939. May. P. 153.*
Ice Stadium at Nottingham, by R. W. Cooper [*A.*].

KENTIKU SEKAI (TOKYO). *1939. April.*
Fine horse race stadium at Kyoto, by T. Yasui.

THEATRES—CINEMAS

ARCHITECTURE ILLUSTRATED. *1939. May. P. 132.*
The Metropole Cinema, Westcliff-on-Sea, by R. W. Cooper [*A.*].

ARCHITECTURAL RECORD (NEW YORK). *1939. May. P. 44.*
Large circular auditorium to seat 30,000 ; a unit in a proposed civic centre for Los Angeles, by W. F. Ruck and Z. Witkin.

STROITELSTVO (MOSCOW). *1939. No. 2. P. 11.*
The Palace of the Soviets, Moscow. Some drawings of the interior, and also details of the structural steelwork.

АРХИТЕКТУРА (MOSCOW). *1939. No. 4. P. 53.*
Article on the acoustics of the main hall of the Palace of the Soviets, Moscow, by L. Rosenberg.

BOUWBEDRIJF EN OPENBARE WERKEN (THE HAGUE). *1939. 26 May. P. 143.*
The new " Rembrandt " cinema in Amsterdam, by W. and C. M. J. Noorlander.

BYGGMÄSTAREN (STOCKHOLM). *1939. No. 14. P. 197.*
Theatre and concert hall at Karlskrona.

ARCHITETTURA (ROME). *1939. March. P. 143.*
The new " Eliseo " theatre in Rome, by L. Piccinato. Good photographs of the interior.

RELIGIOUS

ARCHITECTURAL DESIGN AND CONSTRUCTION. *1939. May. P. 173.*
Tenth Church of Christ, Scientist, at Blackheath, by O. P. Milne [*F.*].

HOUSES

ARCHITECTURAL RECORD (NEW YORK). *1939. May. P. 87.*
Reference study on Planning Units for House Design, surveying current trends of house design in terms of the new techniques that are developing from the growing trend towards increasing industrialisation of building processes, and giving in graphic and usable form provisions for a number of major activities which have become standard requirements of upper middle-class American families. Planning for these requirements is dealt with on a basis of furniture-group units. The section ends with eight representative small houses.

ARCHITECTURAL RECORD (NEW YORK). *1939. May. P. 59.*
Nine examples of units designed for growing flowers and plants inside domestic buildings.

ARCHITECTURAL FORUM (NEW YORK). *1939. May. P. 333.*
Article on the design for the avoidance of accidents in the home, including a " home safety check list " giving the types of accident which are frequent, and the precautions to be taken against them.

PENCIL POINTS (NEW YORK). *1939. May. P. 297.*
A number of domestic kitchens ; photographs, plans, sections and details.

HOUSING

ARCHITECTURAL FORUM (NEW YORK). *1939. May. P. 367.*
Section on the " arithmetic of land development," dealing with site selection, subdivision into streets, lots and parks, street pattern, etc. Illustrations of a F.H.A. housing scheme in Columbus, Ohio. Section on the factory production of the Stoddart timber house by the General Housing Corporation, a basic four-room house constructed in two complete halves and fastened together on the site, and capable of extension by the addition of further units.

FARMS

R.I.B.A. JOURNAL. *1939. 22 May. P. 719.*
Land Settlement Schemes in Wales. The majority of the estates are being run as co-operative farms, instead of the more usual smallholdings. Architect, T. Alwyn Lloyd [*F.*].

ARCHITECTURAL RECORD (NEW YORK). *1939. May. P. 53.*
Winning designs in the " Productive Home " competition ; individual family houses for land settlement schemes.

A.R.P.

ARCHITECTS' JOURNAL. *1939. 1 June.*
Special Civil Defence number. An analysis by F. J. Samuely and C. W. Hamann of the Government's policy for A.R.P. structures, reviewing all relevant official publications, explaining the standards of protection laid down, and illustrating methods of providing the required protection under varying conditions.

THE BUILDER. *1939. 26 May.*
The fourth supplement on structural precautions. A digest of the Government's requirements for air raid shelters, by Oscar A. Bayne [*A.*] and R. Cotterell Butler [*A.*].

ARCHITECTURAL DESIGN AND CONSTRUCTION. *1939. May.*
A.R.P. supplement. Civil Defence Bill, the requirements of the Structural Code ; the planning and construction of shelters, by C. W. Glover ; lessons of Barcelona, by J. Pinckheard [*A.*] ; shelters in flats and factories, by T. P. Bennett [*F.*] and G. L. Cruikshank [*A.*] ; and an analysis of Tecton's Finsbury scheme for deep shelters.

OFFICIAL ARCHITECT. *1939. May. P. 592.*
Two A.R.P. Warden's shelters, one of concrete and one of steel, recently completed by the Hackney Borough Council.

Accessions to the Library

1938-1939—XIII

Lists of all books, pamphlets, drawings and photographs presented to or purchased by the Library are published periodically. It is suggested that members who wish to be in close touch with the development of the Library should make a point of retaining these lists of reference.

Any notes which appear in the lists are published without prejudice to a further and more detailed criticism.

Books presented by publishers for review marked R.

Books purchased marked P.

* *Books of which there is at least one copy in the Loan Library*

ARCHITECTURE

ARCHITECTS' COMPENDIUM
——. J. E. Sears and J. E. Sears junr., orig. eds. H. Fagg, ed. (53rd year.) 1939.
Lond. : Compendium Pubg. Co. 1939. £2 2s. R.

ARCHITECTS' STANDARD CATALOGUES
1939-1941. (9th ed.)
2 vols. Lond. : Standard Catalogue Co. [1939.] R.

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HITCHCOCK (H. R.), *junr.* Inf. file
American architectural books. 72 : 016 (73)
Part iv. N—R.
1939. *Presented by the Author.*

HISTORY

OFFICE OF WORKS : ANCIENT MONUMENTS BOARD
Ancient monuments of Great Britain. List of monuments (to . . . 1938) *etc.*
1939. 2s. R.

× MS.
ALLEN (J. S.) 72.032.8
Some notes on a tour of the sites of Greek cities. (Athens Bursary, 1937, report.)
typescript & *Ph.* 13″. [1937.]
Presented by the Author [*A.*].

RANDOLPH (W.) 72.036.6
A Century of English architecture.
pam. 9″. Lond. : Heath Cranton. 1939. 1s. R.

FALUDI (EUGENIO), *collaborators of*
*Architetture di Eugenio Faludi.
ob. 9″×11″. [1938.]
Presented through the Exhibition Sub-Committee. To Loan Library.

PROFESSIONAL PRACTICE

MITCHELL (G. ERIC) 72.08 : 34
*Model building byelaws illustrated *etc.*
9½″. vii + 172 pp. Lond. : Batsford. 1939. 10s. 6d. R. & P.

NEW ZEALAND STANDARDS INSTITUTION 72.08 : 34 (931)
N— Z— Standard model building by-law. Sections i—x.
8½″. 94 pp. Wellington, N.Z. 1935. 4s. 6d. R.
With Corrigenda, *leaflet, and* Addenda, *dupl. typescript, inserted.*

AUCKLAND, *N.Z., City* 72.08 : 34 (931 A)
The A— City by-laws. Nos. 1 and 2.
8¼″. xliii + 314 pp. + folding map. Auckland. 1925. 2s. 6d.
Presented by the Corporation.

BUILDING TYPES

(CIVIL)

725.131 (73 SP) + 725.151 (73 SP)
ELLERBE *and Co., and* HOLABIRD AND ROOT, *architects*
Saint Paul City Hall and Ramsey County Courthouse, St. Paul, Minnesota. (*From* Amer. Archt., July.)
pam. 12″. [New York.] 1933.
Presented through the Exhibition Sub-Committee.
With Statement of costs, *typescript, inserted.*

Inf. file
C.P.R.E. 725.75 + 728.1] 699.895
National camps. A memorandum *etc.*
pam. 9¾″. Lond. 1939. R.

SOUTHERN (RICHARD) 725.822.93 : 792
Proscenium and sight-lines. *Etc.*
8¾″. 235 pp. Lond. : Faber & Faber. 1939. 12s. 6d. R.

(RELIGIOUS)

× MS.
KAUFMAN (I.) 726.3.03
Evolution of synagogue architecture. (Thesis for Final Examination, Dec.)
typescript, *Repr. of D.*, and *Ph.* 10¾″. 1938.
Presented by the Author.

(DOMESTIC)

MINISTRY OF HEALTH 728.1
About housing.
pam. 8½″. Lond. : H.M.S.O. 1939. 4d. R.

728.1 (06)
NATIONAL HOUSING AND TOWN PLANNING COUNCIL
[Memoranda.] (9.) [Some are revised eds.]
9 pams. 13¼″. Lond. 1939. R.

MINISTRY OF HEALTH 728.1 : 333.32
Housing Acts, 1935 and 1936, Housing (Rural Workers) Acts, and Small Dwellings Acquisition Acts. Interest on loans, etc. (Circular 1804.)
[Same.] (Circular 1822.)
each leaflet 9¾″. Lond. : H.M.S.O. 1939. 1d. R.

728.1 : 334.1
CENTRAL HOUSING ADVISORY COMMITTEE—HOUSE MANAGEMENT AND HOUSING ASSOCIATIONS SUB-COMMITTEE
The Operations of housing associations. Report *&c.*
pam. 9¾″. Lond. : H.M.S.O. 1939. 3d. R.

MINISTRY OF HEALTH 728.1 : 334.1
Housing associations. (Circular 1802.)
leaflet. 9¾″. Lond. : H.M.S.O. 1939. 1d. R.

Inf. file
KAUFMANN (E. C.) 728.23
Maisonettes. (Housing Centre.)
dupl. typescript. 13″. 1939. R.

TOY (SIDNEY) 728.81 + 725.96
*Castles. A short history of fortifications *&c.*
9¾″. xiv + 241 pp., incl. pls. Lond. : Heinemann. 1939. £1 5s. R. & P.

BUILDING SCIENCE

BURNET, TAIT AND LORNE, *eds.* 69 (084)
The Architects' Journal Library of planned information.
Vol. 5. 12½″. Lond. 1939. R.

SPECIFICATION, *annual* 69 [72.08 : 608.375
*——. 1939. (41st year.) F. R. S. Yorke, ed.
12¾″. Lond. 1939. 10s. 6d. R. *To Loan Library.*

MATERIALS

BRITISH STANDARDS INSTITUTION 69 (083.74)
British standard specifications :—
691.11 : 620.197
No. 838—B. s. method of test for the toxicity of wood preservatives to fungi.
8½″. Lond. 1939. 2s. R.

691.11 [69.08 : 389
IMPERIAL INSTITUTE : ADVISORY COMMITTEE ON TIMBERS
Grading rules and standard sizes for Empire hardwoods *&c.*
2nd ed. 9¾″. 28 pp. Lond. 1937. 1s. R.

LEA (F. M.) 691.54 : 539.2
Comparative tests on the fineness of cements. (Socy. of Chemical Industry. *From* Jnl., Apl.)
pam. 11″. Lond. 1939. R.

691.71 : 620.193
IRON AND STEEL INSTITUTE : CORROSION COMMITTEE
Report : Fifth . . . by a Joint Committee of the I— and S— I— and the British I— and S— Federation to the I— and S— Industrial Research Council. (Special report No. 21.)
8½″. Lond. 1938. R.

COPPER DEVELOPMENT ASSOCIATION
691.771
*Aluminium bronze. (Pubn. No. 31.)
8¾″. Lond. [1938.] R. *To Loan Library.*

691.73 : 693.068.34
*Copper pipe-line services in building. (Pubn. No. 25.)
9¾″. Lond. 1938. R. *To Loan Library.*

CONSTRUCTION

INSTITUTION OF STRUCTURAL ENGINEERS
Report on steelwork for buildings. 693.54
Part 1. Loads and stresses.
2nd revn. [=3rd ed.] pam. 8½″. Lond. 1938. 1s. R.

693.55
Report on reinforced concrete for buildings and structures.
Part 1—Loads.
pam. 8¾″. Lond. 1938. 1s. R.

D.S.I.R.
DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH : BUILDING RESEARCH
Technical papers :
693.55
No. 24. Studies in reinforced concrete.
vii. The strength of long r— c— columns . . . to destruction. F. G. Thomas.
1939. 9d. R.

SANITARY SCIENCE AND EQUIPMENT

696.1 : 614 (063)
PUBLIC HEALTH SERVICES CONGRESS AND EXHIBITION, 6TH [? *London*], 1938
Report.
10¼″ × 8″. ond. [1938 or 1939.] R.

MINISTRY OF HEALTH 696.11 : 628.1
The Bacteriological examination of water supplies. (Reports on public health and medical subjects, No. 71.)
Revised ed. pam. 9¾″. Lond. : H.M.S.O. 1939. 1s. R.

POLITICAL AND ECONOMIC PLANNING 696.2 : 665.7
Report on the gas industry in Great Britain.
10″. (vii) + 213 pp. Lond. 1939. 10s. 6d. R.

PROOFING

IMAMURA (AKITUNE) 699.841
Theoretical and applied seismology. (D. Kennedy, trans.)
8¾″. (ii) + iii + vi + 358 pp. Tokyo : Maruzen. 1937. (15s.) R.

699.895
HOME OFFICE : AIR RAID PRECAUTIONS DEPARTMENT
*Directions for the erection of domestic surface shelters.
pam. 9¾″. Lond. : H.M.S.O. 1939. 2d. R. (2).

SISSON (H. A.) 699.895
On guard against gas [attack].
7½″. 91 pp. Lond. : Hutchinson. [1939.] 2s. R.

699.895 : 72.096.3
HOME OFFICE : AIR RAID PRECAUTIONS DEPARTMENT
*Provision of air raid shelters in basements. (Memorandum No. 10.)
pam. 9¾″. Lond. : H.M.S.O. 1939. 4d. R (2).

ENGINEERING

INSTITUTION OF MECHANICAL ENGINEERS
Proceedings. Vol. 138. 1938. Jan.-Apl. [1939.] R.

TOPOGRAPHY

WALLACE (DOREEN) 91 (42.6 + 42.56/59)
East Anglia. *&c.* (The Face of Britain *series.*)
8¼″. viii + 120 pp. + pls. Lond. : Batsford. 1939. 8s. 6d. R.

TOWN AND COUNTRY PLANNING

COOK, HAMMOND & KELL, *Ltd., publ.* 711.111.5 : 912
Revised notations for town planning maps, compiled from and in accordance with the model clauses of the Ministry of Health's Memo. T. & C.P. 5 (revised).
folded sheet. 20½″ × 9½″ (folded, 9½″) (coloured). [1939.] R.

MINISTRY OF HEALTH 711.559.61
Town and Country Planning Act, 1932. Sites for Territorial Army associations. (Circular 1821.)
leaflet. 9¾″. Lond. 1939. R.

DRAWINGS AND PHOTOGRAPHS

STEVENS (ALFRED)
Drawings. (Also other prints.)
In album. fo. [18—].
Presented by Capt. G. Fenwick-Owen, F.S.A.

VIDOR (EMIL)
A Selection of works of E— V— *&c., cover title.*
Ph. and *Ph. of D. in album.* ob. fo. [19—.]
Presented by M. Vidor.

BREWER (CECIL C.)
House (town) : Palma (Majorca). Town views : Brevelenez (Brittany), Mont S. Michel, Palma (showing S. Agostino, tower), Pisa (a piazza), S. Jean du Doigt (Brittany), Tarragona.
7 sheets. *W.C. D.* 1909-12 & n.d.
Presented through Mr. H. M. Fletcher [*F.*].

Correspondence

A.R.P. PUBLICATIONS

The Scope of the Tecton Book

To the Editor, JOURNAL R.I.B.A.

SIR,—We notice that the bibliography published in your issue of 22 May under the heading "Structural Air Raid Precautions" contains a short review of our book *Planned A.R.P.*

May we be allowed to draw attention to certain remarks contained in this review which we feel must have been included as a result of a complete misunderstanding?

It is stated that "since the book is a justification of the particular designs of shelter in the Finsbury scheme, it seeks to prove the disadvantages of other types of shelter."

This statement is extremely misleading. While it is true that the book contains a description of the Finsbury shelters, this is only a very small proportion of the whole. The major part of the book is made up of an attempt to show how the safety-value of any shelter can be mathematically measured and how various existing types may be rendered safer or less safe to suit different conditions. This analysis is based closely upon a study of the problem which we found it necessary to make in collaboration with Mr. O. Arup, as a preliminary to the preparation of the Finsbury scheme. Far from "seeking to prove the disadvantages" of these various forms of shelter, we repeatedly point out that each of them is particularly suited to certain conditions. The Finsbury type of shelter was evolved, only *after* this preliminary research had been completed, as an attempt to deal economically with the problem of crowded and highly vulnerable city areas, for which there was no ready-made solution and for which, incidentally, no alternative has yet been put forward.

In fact, far from being an attempt to discredit all types of shelter other than those which we happen to have had a hand in designing, our book was intended to introduce a method which would allow *all* types to be comparatively evaluated, and this would seem to be the most objective line of approach possible.

The review seems to imply that the conclusions of our book may be invalidated owing to the fact that we used basic assumptions which are now being officially revised. This, again, is a very doubtful suggestion. We were at pains to avoid basing our argument upon any facts whose validity might later become doubtful, as we recognised that factual knowledge on the subject of explosives was, at the time of writing, unreliable. We therefore limited ourselves to the introduction of a comparative method of safety evaluation, by means of which we endeavoured to show only that one shelter was, for example, twice as safe as another, and so on. It will be appreciated that any replacement of data, such as your reviewer suggests, could not have the effect of invalidating either the method or the comparative results reached.

In view of the fact that these criticisms are evidently based on misconceptions, we can only conclude, either that the reviewer did not read the book at all, or that he read it without taking in very much of its meaning, or that, having read and understood it, he decided, for some reason best known to himself, to misrepresent its contents.

We find it hard to believe that this last could be the case, but we feel that where so vitally important a subject is concerned, there can be no room for unconscientious or incompetent reporting.

We are, Sir,
Yours faithfully,
For and on behalf of TECTON,
L. DRAKE [*A.*]

COTMAN AND CHARLES BARRY IN ROUEN

Sir John Soane's House and Museum,
13 Lincoln's Inn Fields, W.C.2
25.5.39

To the Editor, JOURNAL R.I.B.A.

SIR,—In connection with the Cotman exhibition, I think the enclosed from the Travel Diaries of Sir Charles Barry* (1817-20) may interest your readers.

Friday, 4 July 1817. Rouen.

"I made a sketch of the outside, and when I had nearly compleated Mr. John Scott came to me with a gentleman named Cotman, an artist who visited Rouen for the purpose of taking an accurate view of Notre Dame. He is a very intelligent young man, and being something of a Brother chip, I soon made friends with him. We walked together to his Hotel, where he showed me a very large and new invented Camera Lucida by Varley and also a book of sketches of different parts of Norfolk which he is now publishing. After an hour's conversation we went to the table d'hote at Hotel de France, where we had an excellent dinner."

Barry was just 21, and had left England 28 June with Sir John Soane's friend Conduit. Cotman was nearly 13 years older. The building which Barry was drawing was the interesting Corinthian church attached to the Hopital des Invalids.

Yours truly,
ARTHUR T. BOLTON, F.S.A. [*F.*],
Curator

DURHAM KEEP

1 Cloisters,
Temple, London, E.C.4
25.5.39

To the Editor, JOURNAL R.I.B.A.

SIR,—Though most reluctant to infringe on the license due to a reviewer, especially in the case of a kindly and appreciative review, I feel that the reference made to the keep of Durham castle in a review on *Castles*, appearing in last week's JOURNAL, calls for some remark.

The existing keep, as remodelled in 1838-40, stands on the foundations and incorporates much of the walling of the building then in existence for at least five hundred years. When compared with a lithograph of the keep, made in 1838 immediately before the alterations, or with the drawing by

* In the R.I.B.A. Library.

S. & N. Buck, made in 1728, it will be evident that, viewed externally, the existing structure can only be described as "a sham castle," to quote the reviewer, in respect to its openings and battlements.

The moot point is to what extent the keep was remodelled or rebuilt in the fourteenth century. The ancient wall running up the mound from the chapel to the keep dates from the eleventh century, and is of stone. The mound has been called artificial, though the precise depth of made sandy soil on its summit has not, as far as I know, been determined by excavation. There can be little doubt, however, that the foundations of the wall running up its side rest upon very compact soil.

But, in regard to the keep, while, as seen in the old prints referred to, it was entirely different in military character from the tower-houses of the fourteenth century, it bore marked resemblance to many keeps of the Norman period ; and it is to the Norman period that it probably belonged.

In the poetical description of the castle, written by Prior Laurence about 1150, the poet does not say that the citadel, or shell keep—the *arx*—was square, but that the house or tower rising within or above the keep—the *domus sublimior arce*—rested upon four pillars or posts.

Yours faithfully,
SIDNEY TOY [*F.*]

OUR REVIEWER'S COMMENTS ARE AS FOLLOWS :

Mr. Toy has perhaps misunderstood Prior Laurence's reference to the wall of the *arx* or citadel. It was not the keep, blockhouse, or *domus solidata*, which crowned the *apex arcis* or mount, but a *chemise* or wall round its foot. This is clear from his statement that the area inside this wall rose in three stages—the three terraces still observable on the sides of the motte. It must, of course, be kept in mind that Laurence's guide is only evidence for the condition of Durham at the date of its oldest extant edition, such descriptions are brought up to date from time to time ; but it does seem to be indicated that there never was a Norman octagonal shell keep on the motte, and Laurence states that the *arx* wall was circular, not octagonal in plan, while the keep had "twice two" corner posts, not twice four.

As to the "sham castle," I still feel that a block of students' rooms bedizened with battlements and buttresses is a sham castle, even though its outer wall follows the outline of a genuine predecessor ; but I am willing to withdraw sham castle in favour of Folly if the latter term is thought preferable !

H. L. HONEYMAN [*A.*]

"ROMANTICISM AND THE GOTHIC REVIVAL"

To the Editor, JOURNAL R.I.B.A.

DEAR SIR,—Your reviewer, in dealing with *Romanticism and the Gothic Revival*, by Agnes Addison, in the JOURNAL of 6 February last, says that, "Any reader who wants a concise account of this interesting phase of art will find it described and discussed in this book."

This may be so, but the reader needs accuracy as well as conciseness, and this is sadly lacking in the book.

To take Chapter III as an example. The sentences, on page 57 : "By 1830 one hundred and thirty-four churches had been built. . . . There was no attempt at architectural refinement in these structures. . . . Few . . . were in the Gothic style. . . . These buildings are of little architectural value . . ." are a tissue of nonsense.

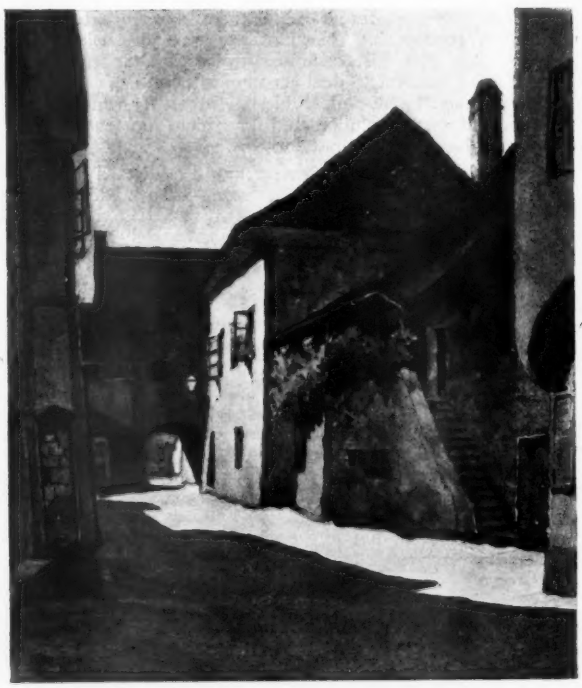
In the first place, for highly technical reasons, it is almost impossible to count these churches. Secondly, more than half were Gothic. Thirdly, they were in two grades, of which the first cost from £20-30,000, a very high figure for those days. Finally, they were the work of well-known architects of the day and some, particularly those in the provinces, are really monumental piles. The disfavour with which they were subsequently regarded was due to the rapid development of the academic phase of the Gothic Revival and also to the equally rapid change in the ecclesiastical outlook.

The author says that "Nash did a great number of Commissioners' churches." This is quite incorrect, for all the churches with which he was concerned can be counted on the fingers of one hand.

There is no reference to James Essex, who was one of the key figures of the early days of the Revival, but Barry's Brighton church of 1826 is dragged in twice, although he had designed several Gothic churches in the North previously, while none of his ecclesiastical works, even including the church at Hurstpierpoint, 1845, will stand comparison with Rickman's earliest work, St. George, Everton, Liverpool, begun in 1809.

The statement by your reviewer that "the book is of value because Eastlake is out of print and Clark is expensive" is curious. Eastlake after nearly seventy years is not only out of print but obsolete, but copies can frequently be picked up for a shilling or two. Clark is a guinea and this book two dollars fifty cents. At the present rate of exchange is there much difference ?

Yours faithfully,
W. W. BEGLEY [*L.*]



Durnstein, 1937. By Sir E. Guy Dawber

Notes

A.A.S.T.A. RUSSIA TOUR

The A.A.S.T.A. are running a tour to Russia starting on 19 August, returning 10 September. The fee to non-members of the Association is £27, to members £26 10s. The tour will visit Leningrad, Moscow, Rostoff-on-Don and Dnieproges. *Applications to go on the tour should be made without delay to* 113 High Holborn.

BOMB-PROOF SHELTERS

On Tuesday, 20 June, at 6 p.m., there will be a lecture at the Institution of Civil Engineers on the Design of Bomb-proof Shelters, by Dr. David Anderson, M.Inst.C.E., Chairman, Design Panel, Engineering Precautions (Air Raid) Committee. This is the third lecture in a series, the first of which, on 6 June by Dr. R. E. Stradling, was on Experimental Work in A.R.P., the second, on 12 June by Col. F. J. Wyatt, O.B.E., M.C. (late R.E.), on Camouflage.

DATES ON WHICH FORTHCOMING R.I.B.A. EXAMINATIONS WILL BE HELD

Intermediate Examination

17, 18, 20, 21 and 23 November 1939. (Last day for receiving applications, 17 October 1939.)

17, 18, 20, 21 and 23 May 1940. (Last day for receiving applications, 10 April 1940.)

15, 16, 18, 19 and 21 November 1940. (Last day for receiving applications, 8 October 1940.)

Final Examination

5, 6, 7, 8, 10, 11 and 13 July 1939. (Last day for receiving applications, 5 June 1939.)

29 and 30 November, 1, 2, 4, 5 and 7 December 1939. (Last day for receiving applications, 27 October 1939.)

3, 4, 5, 6, 8, 9 and 11 July 1940. (Last day for receiving applications, 3 June 1940.)

27, 28, 29 and 30 November, 2, 3 and 5 December 1940. (Last day for receiving applications, 28 October 1940.)

Special Final Examination

5, 6, 7, 8, 10 and 11 July 1939. (Last day for receiving applications, 5 June 1939.)

29 and 30 November, 1, 2, 4 and 5 December 1939. (Last day for receiving applications, 27 October 1939.)

3, 4, 5, 6, 8 and 9 July 1940. (Last day for receiving applications, 3 June 1940.)

27, 28, 29 and 30 November, 2 and 3 December 1940. (Last day for receiving applications, 28 October 1940.)

Statutory Examination for District Surveyor and the Examination for Building Surveyor

4, 5 and 6 October 1939. (Last day for receiving applications, 4 September 1939.)

1, 2 and 3 May 1940. (Last day for receiving applications, 1 April 1940.)

9, 10 and 11 October 1940. (Last day for receiving applications, 9 September 1940.)

NOTES FROM THE MINUTES OF THE COUNCIL 8 MAY 1939

Report of the Special Committee on Refugees

The Council approved the report of the Special Committee on Refugees and reappointed the Committee to carry out the recommendations contained in the report.

The Council have conveyed their congratulations to the Special Committee on the production of a comprehensive and useful report in a very short time.

R.I.B.A. Architecture Bronze Medals : Royal Society of Ulster Architects

The Council formally approved the award of the Jury in favour of Saint Jude's Church Halls, Belfast, designed by Mr. R. H. Gibson [*F.*].

Appointments

Joint Committee of Representatives of the Constructional Industry to advise on Civil Defence.

Mr. Thos. E. Scott [*F.*].

Home Office A.R.P. Department : Professional Advisory Committee (Shelters).

Mr. W. H. Ansell [*F.*].

Building Divisional Council of the British Standards Institution.

Mr. A. H. Barnes [*F.*] in place of the late Mr. C. J. Morreau [*A.*].

Twenty-fifth Annual Conference of the National Association for the Prevention of Tuberculosis, Belfast.

Mr. T. R. Eagar [*F.*], President of the Royal Society of Ulster Architects.

Hon. Auditors for 1939-1940.

Mr. J. D. Hossack [*F.*] and Mr. J. Maclaren Ross [*A.*] were nominated as Hon. Auditors for the Session 1939-1940.

Membership.

The following members were elected :—

As Fellows, 39 ; as Associates, 19 ; as Licentiates, 8.

Election 19 June 1939.

Applications for membership were approved as follows :—

As Fellows, 22 applications ; as Associates, 15 applications ; as Licentiates, 5 applications.

Reinstatements.

The following ex-members were reinstated :—

As Associates : Arthur Milton Bisiker [*Ret. A.*], Ernest Godfrey Page, Hugh Aitken Hutchison Walker.

Transfer to the Retired Members' Class.

The following members were transferred to the Retired Members' Class :—

As Retired Licentiates : Charles Richmond Rowland Clark, Charles Henry Kempthorne.

Resignations.

The following resignations were accepted with regret :—

Sidney Kyffin Greenslade [*F.*], Hugh John Cole Marshall [*F.*], Harold Stanley Day [*L.*], Frank Henry Langley [*L.*], Fred Mould Rake [*L.*].

Notices

THE TWELFTH GENERAL MEETING, MONDAY, 19 JUNE 1939, AT 8 P.M.

The Twelfth General Meeting of the Session 1938-1939 will be held on Monday, 19 June 1939, at 8 p.m., for the following purposes :—

To read the minutes of the One Hundred and Fifth Annual General Meeting held on 8 May 1939 ; formally to admit new members attending for the first time since their election.

To read the report of the Scrutineers appointed to examine the voting papers for the election of the Council for the Session 1939-1940.

INFORMAL DISCUSSION OF MATTERS OF PROFESSIONAL INTEREST

At the conclusion of the above General Meeting there will be an informal and private discussion on matters of current professional interest or concern. Members are invited to bring up for discussion, with or without notice, subjects of professional interest or difficulty.

JOHN SELL COTMAN

The Exhibition of the collection of architectural drawings and water-colours by John Sell Cotman, bequeathed to the R.I.B.A. by Mr. Sydney Kitson, F.S.A. [*F.*], will remain open in the Henry Florence Hall at the R.I.B.A. until Wednesday, 28 June. The Exhibition will be open each day, Sundays excepted, from 10 a.m. to 8 p.m. (Saturdays 10 a.m. to 5 p.m.).

THE LATE SIR GUY DAWBER

The Exhibition of water-colours and architectural sketches by the late Sir Guy Dawber, R.A., F.S.A., Past President R.I.B.A., will remain open until Saturday, 17 June, from 10 a.m. to 8 p.m. (Saturday 10 a.m. to 5 p.m.).

THE R.I.A.I. CENTENARY CELEBRATION AND ARCHITECTS CONFERENCE, DUBLIN

21-24 JUNE 1939

Final arrangements for all the events of the Conference are now being made. It is hoped that all members and students who have not already done so will at once refer to the programme sent to them with the issue of the JOURNAL for 8 May and send in their names without delay for such of the events as they desire to take part in.

Members of the R.I.B.A. and the Allied Societies who are officials of local authorities will be cordially welcomed as delegates to the Conference.

TRAVEL FACILITIES

Arrangements have been made with the various railway companies to issue return tickets to Dublin, available for one calendar month from the date of issue, at the ordinary single fare and one-third for the double journey. The concession will apply from all stations in Great Britain and Ireland and to the Irish ports by railway-owned steamers and the boats of the following independent steamship companies :—

Belfast Steamship Company.

British and Irish Steam-Packet Company.

City of Cork Steam-Packet Company.

Messrs. Burns & Laird Lines, Ltd.

Members and their friends who desire to take advantage of this special reduced fare concession must present at the booking office a signed voucher to be previously obtained from the Secretary R.I.B.A.

APPOINTMENT OF R.I.B.A. COMMITTEES FOR THE SESSION 1939-1940

Members are invited to submit for consideration by the Executive Committee and Council suggestions for the personnel of the various committees for the Session 1939-1940. Lists of the present committees will be found on pages 20 to 29 of the current issue of the *Kalendar*.

PROFESSIONAL ADVERTISING

The attention of the Practice Committee has been drawn to the fact that the publishers of certain journals are approaching architects for details of their professional activities, which the publishers propose to embody in the editorial columns of their journals. In the case of one particular firm of publishers, several members forwarded to the Institute the proposed article as drafted by the editor and sent to the architects for any additions or amendments the architects desire. In each case the wording of the articles is identical, with the exception of the names and addresses of the firms of architects to whom they were sent.

The Committee desire to warn members generally against this undesirable form of publicity. The acceptance by members of invitations of this nature from firms of publishers is, in the opinion of the Committee, directly contrary to the Code of Professional Practice and tantamount to advertising.

THE R.I.B.A. KALENDAR 1939-1940

The attention of members is drawn to the leaflet enclosed with the issue of the JOURNAL for 22 May 1939. Changes of address, etc., for inclusion in the forthcoming issue of the *Kalendar* must be notified to the Secretary R.I.B.A. BEFORE SATURDAY, 1 JULY.

THE USE OF TITLES BY MEMBERS OF THE ROYAL INSTITUTE

In view of the passing of the Architects Registration Act 1938, members whose names are on the Statutory Register are advised to make use simply of the title "Chartered Architect" after the R.I.B.A. affix. The description "Registered Architect" is no longer necessary.

Members who are qualified for registration and have not already done so are reminded of the importance of applying for such registration without delay. Full particulars will be sent on application to the Secretary R.I.B.A.

LICENTIATES AND THE FELLOWSHIP

By a resolution of the Council passed on 4 April 1938, on and after 1 January 1939 all candidates whose work is approved will be required to sit for the examination, which will be the design portion of the Special Final Examination, and no candidates will be exempted from the examination.

NOTE.—The above resolution will not affect Licentiates of over 60 years of age applying under Section IV, Clause 4 (c) (ii) of the Supplemental Charter of 1925.

ASSOCIATES AND THE FELLOWSHIP

Associates who are eligible and desirous of transferring to the Fellowship are reminded that if they wish to take advantage of the election to take place on 23 October 1939 (overseas candidates 6 November) they should send the necessary nomination forms to the Secretary R.I.B.A. not later than Saturday, 1 July 1939

OVERSEAS APPOINTMENTS

When members are contemplating applying for appointments overseas they are recommended to communicate with the Secretary R.I.B.A., who will supply them with any available information respecting conditions of employment, cost of living, climatic conditions, etc.

Competitions

The Council and Competitions Committee wish to remind members and members of Allied Societies that it is their duty to refuse to take part in competitions unless the conditions are in conformity with the R.I.B.A. Regulations for the Conduct of Architectural Competitions and have been approved by the Institute.

While, in the case of small limited private competitions modifications of the R.I.B.A. Regulations may be approved it is the duty of members who are asked to take part in a limited competition to notify the Secretary of the R.I.B.A. immediately, submitting particulars of the competition. This requirement now forms part of the Code of Professional Practice in which it is ruled that a formal invitation to two or more architects to prepare designs in competition for the same project is deemed a limited competition.

COMPETITION FOR ALTERATIONS TO CWM WORKING MEN'S CLUB AND INSTITUTE, CWM, MON.

Members of the Royal Institute of British Architects and of its Allied Societies must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for architectural competitions.

AUCKLAND, NEW ZEALAND: NEW CATHEDRAL

The General Trust Board of the Diocese of Auckland invite members of the New Zealand Institute of Architects resident in New Zealand or overseas to submit in competition designs for a new Cathedral.

Assessor: Sir Giles Gilbert Scott, R.A. [*F.*].
Premiums: £1,000, £400, £200 and £100.
Last day for submitting designs: 15 November 1939.
Last day for questions: 31 May 1939.

Conditions of the competition may be obtained on application to (*a*) The General Trust Board, P.O. Box 652, Auckland, New Zealand, or (*b*) The Secretary R.I.B.A., 66 Portland Place, London, W.1. Deposit £1 1s.

DUDLEY: NEW MIXED SENIOR SCHOOL

The County Borough of Dudley Education Committee invite architects with offices in Warwickshire, Worcestershire, Herefordshire, Shropshire and Staffordshire to submit in competition designs for a new mixed senior school to be erected on a site at Halesowen Road, Netherton.

Assessor: Mr. S. N. Cooke [*F.*].
Premiums: £150, £100 and £50.
Last day for submitting designs: 31 August 1939.
Last day for questions: 30 June 1939.

Conditions of the competition may be obtained on application to the Director of Education, Education Offices, St. James's Road, Dudley. Deposit £1 1s.

EDINBURGH: NEW EXHIBITION HALL

The Lord Provost, Magistrates and Council of the City of Edinburgh invite architects in association with consulting engineers, both resident in Great Britain, to submit in competition designs for an Exhibition Hall, to be erected on the site of the present Waverley Market, Princes Street, Edinburgh.

Assessor: Mr. Thomas S. Tait [*F.*].
Premiums: 500 guineas, 300 guineas and 200 guineas.
Last day for submitting designs: 31 August 1939.
Last day for questions: 15 February 1939.

HUTTON, NEAR PRESTON, LANCS: NEW POLICE HEADQUARTERS

The Lancashire Standing Joint Committee for Police and other purposes invite Chartered and/or Registered architects to submit in competition designs for a new General Police Headquarters and Training School to be erected at Hutton, near Preston.

Assessor: Sir Percy Worthington, Litt.D., F.S.A. [*F.*].
Premiums: £500, £400 and £300.
The last day for submitting designs has been extended to 1 August 1939.
Last day for questions: 28 January 1939.

LAGOS, NIGERIA: NEW SUPREME COURT HOUSE

The Government of Nigeria invite architects of British nationality and resident in Great Britain and Africa who are members of the R.I.B.A. or of its Allied Societies to submit in competition designs for new Supreme Courts in Lagos, Nigeria.

Assessor: Mr. A. F. B. Anderson [*F.*].
Premiums: £500, £300 and £200.
Last day for submitting designs: 30 June 1939.
Last day for questions: 14 February 1939

MARGATE: NEW CIVIC CENTRE

The Corporation of the Borough of Margate invite architects of British nationality who are members of the R.I.B.A. or its Allied Societies to submit in competition designs for a new Civic Centre to be erected on a site overlooking Hartsdown Park, Margate.

Assessor: Mr. A. F. B. Anderson [*F.*].
Premiums: £500, £300 and £200.
Last day for submitting designs: 31 August 1939.
Last day for questions: 31 March, 1939.

OLDHAM: NEW ELECTRICITY OFFICES

The Corporation of the County Borough of Oldham invite registered architects to submit in competition designs for new Offices and Departmental Buildings for the Electricity Department to be erected on a site in Union Street.

Assessor: Professor R. A. Cordingley [*F.*].
Premiums: £400, £250 and £100.
Last day for submitting designs: 4 October 1939.
Last day for questions: 5 June 1939.

Conditions of the competition may be obtained on application to Mr. F. L. Ogden, Borough Electrical Engineer, Greenhill Offices, Oldham. Deposit £2 2s.

COMPETITION RESULT

COMPETITION FOR DESIGN FOR A CAMP

(Promoted by the Building Centre)

1. Mr. Richard Sheppard [*A.*] and Miss Jean Shufflebotham [*A.*] (London).
2. Miss Mary Crowley [*A.*], Mr. Erno Goldfinger, and Miss Justin Blanco White [Student] (London).
3. Mr. M. Godden (Orpington, Kent).
   Mr. Wells Coates [*F.*] and Mr. Serge Chermayeff [*F.*] (London).

MEMBERS' COLUMN

Owing to limitation of space, notices in this column are restricted to changes of address, partnerships vacant or wanted, practices for sale or wanted, office accommodation, and appointments vacant. Members are reminded that a column in the Advertisement Section of the Journal is reserved for the advertisements of members seeking appointments in architects' offices. No charge is made for such insertions and the privilege is confined to members who are definitely unemployed.

PRACTICE FOR SALE

ARCHITECT's old-established practice, in Leeds, for sale ; principal could remain temporarily as partner.—Reply Box 1959, c/o Secretary R.I.B.A.

PARTNERSHIP WANTED

ASSOCIATE (32), B.A. Cantab., wide and varied experience, small own practice, wishes to meet busy architect with view to forming partnership (or would consider responsible salaried post with view to partnership later) ; London or home counties.—Reply Box 2659, c/o Secretary R.I.B.A.

NEW PARTNERSHIP

MR. JAMES S. KIRKWOOD [*A.*] has entered into partnership with Mr. Will J. B. Wright [*L.*], at 26 Blythswood Square, Glasgow, C.2. (Telephone No. : Glasgow Douglas 3228.) The style of the firm will be known as Messrs. Wright & Kirkwood, Chartered Architects.

ASSISTANT WANTED

WEST-COUNTRY firm of Architects require Competent Assistant. Experience of School and Hospital work essential, and of Ecclesiastical work desirable. State age and salary.—Reply Box 6639, c/o Secretary R.I.B.A.

OFFICE ACCOMMODATION TO LET

OFFICE to let two doors out of Bond Street—Piccadilly end. £15 per quarter, including telephone rental and answering thereof.—Box 5639, c/o Secretary R.I.B.A.

OFFICE ACCOMMODATION WANTED

ASSOCIATE with small country practice requires room in architect's office near Victoria or Cannon Street stations. Moderate rent.—Reply Box 1659, c/o Secretary R.I.B.A.

NEW TITLE OF FIRM—CHANGE OF ADDRESS

MESSRS. H. EDMUND MATHEWS [*F.*], E. D. Jefferiss Mathews, P.A.S.I. [*A.*], and Oswald D. Pearce [*F.*] have removed to 3 Ebury Street, Victoria, S.W.1 (Victoria 6223). The name of their firm will in future be known as J. Douglass Mathews & Partners.

CHANGES OF ADDRESS

MR. WILLIAM G. DEY, A.M.T.P.I. [*A.*], has changed his address to 20 Dovecot Road, Edinburgh, 12. Tel. 86731.

MR. R. LINDSAY LITTLE [*A.*] has changed his office address to New Prudential Building, 39-49 Martin Place, Sydney, New South Wales.

MR. NORVAL R. PAXTON, M.C. [*A.*], would be glad if members would note his change of office address to 11 Cavendish Road, Leeds, 1.

Architects' and Surveyors' Approved Society

ARCHITECTS' ASSISTANTS' INSURANCE FOR THE NATIONAL HEALTH AND PENSIONS ACTS

Architects' Assistants are advised to apply for the prospectus of the Architects' and Surveyors' Approved Society, which may be obtained from the Secretary of the Society, 113 High Holborn, London, W.C.1.

The Society deals with questions of insurability or the National Health and Pensions Acts (for England) under which, in general, those employed at remuneration not exceeding £250 per annum are compulsorily insurable.

In addition to the usual sickness, disablement and maternity benefits, the Society makes grants towards the cost of dental or optical treatment (including provision of spectacles).

No membership fee is payable beyond the normal Health and Pensions Insurance contribution.

The R.I.B.A. has representatives on the Committee of Management, and insured Assistants joining the Society can rely on prompt and sympathetic settlement of claims.

Architects' Benevolent Society

66 PORTLAND PLACE, W.1

FOUNDED 1850

The object of the Society is to afford assistance to architects, architects' assistants, and their widows and children by means of grants and pensions.

Subscriptions and donations of any amount are urgently needed. An annual subscriber of £1 1s. is entitled to recommend annually two applicants for relief.

A.B.S. INSURANCE DEPARTMENT

THE ARCHITECTS' SPECIAL MOTOR CAR INSURANCE AT LLOYD'S

In conjunction with a firm of Lloyd's Insurance Brokers the Architects' Benevolent Society's Insurance Committee have devised a Special Motor Car Policy for Architects. This policy and the special advantages to be gained from it are available only to members of the Royal Institute of British Architects and its Allied and Associated Societies.

Special features include :

1. *Agreed values.* In the event of a total destruction or loss, insured value is agreed as the replacement value.
2. A cumulative no-claim bonus from 15 per cent., rising to 33⅓ per cent. in the fourth year.
3. No extra premium for business use of car by the insured in person.
4. Free manslaughter indemnity up to £250.
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SPECIMEN RATES FOR FULL COMPREHENSIVE POLICIES ARE GIVEN BELOW. OTHER RATES QUOTED ON APPLICATION

	Premium £	s.	d.
7 h.p. Austin, valued at £100	10	15	0
9 h.p. Standard, valued at £100	11	10	0
11 h.p. Morris, valued at £150	12	5	0
20 h.p. Hillman, valued at £300	16	5	0

(The rates shown do not apply to cars garaged in London and Glasgow and Lancashire manufacturing towns ; rates for these areas will be quoted on application.)

All enquiries with regard to the Special Motor Car Policy for Architects should be sent to the Secretary, A.B.S. Insurance Department, 66 Portland Place, W.1.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expressions of the Institute.

Members sending remittances by postal order for subscriptions of Institute publications are warned of the necessity of complying with Post Office Regulations with regard to this method of payment. Postal orders should be made payable to the Secretary R.I.B.A. and crossed.

Members wishing to contribute notices or correspondence must send them addressed to the Editor not later than the Tuesday prior to the date of publication.

Back numbers of the JOURNAL can be obtained at the price of 1s. 9d., including postage throughout the world. For orders of more than six copies discounts are given. Orders must be prepaid.

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